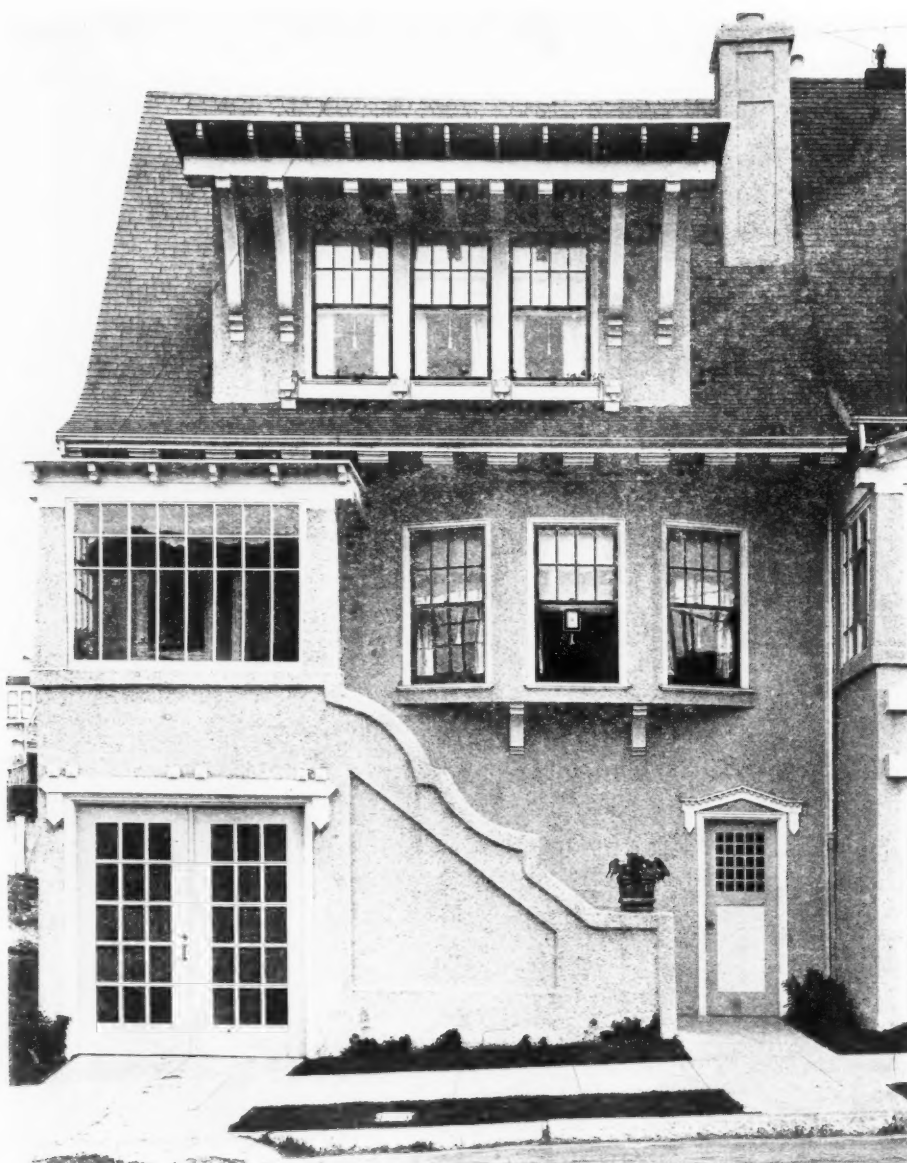


The
BUILDING REVIEW
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April 1919 Volume XVII Number 4



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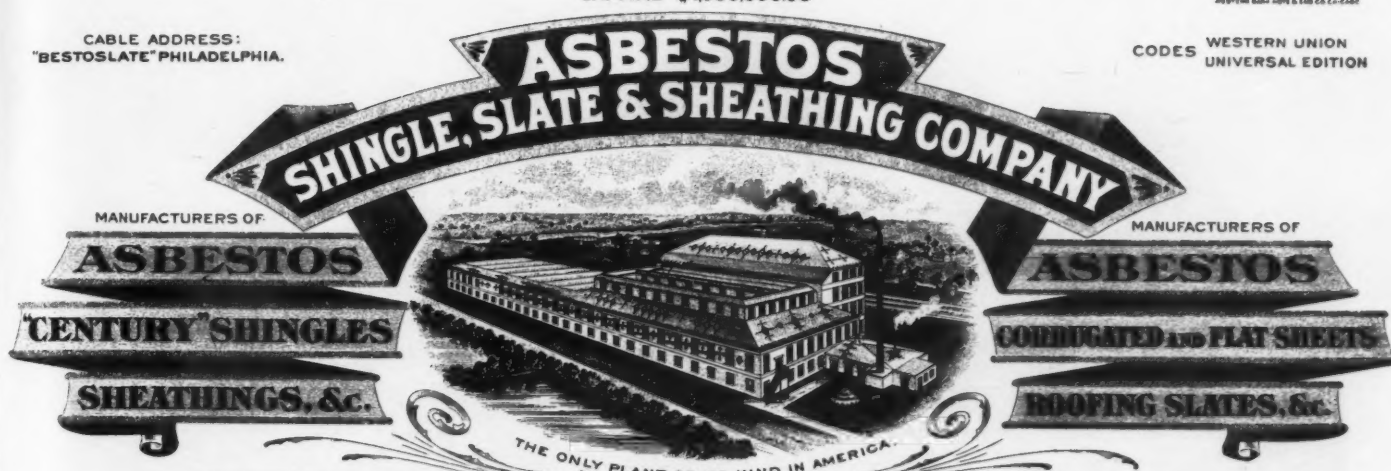
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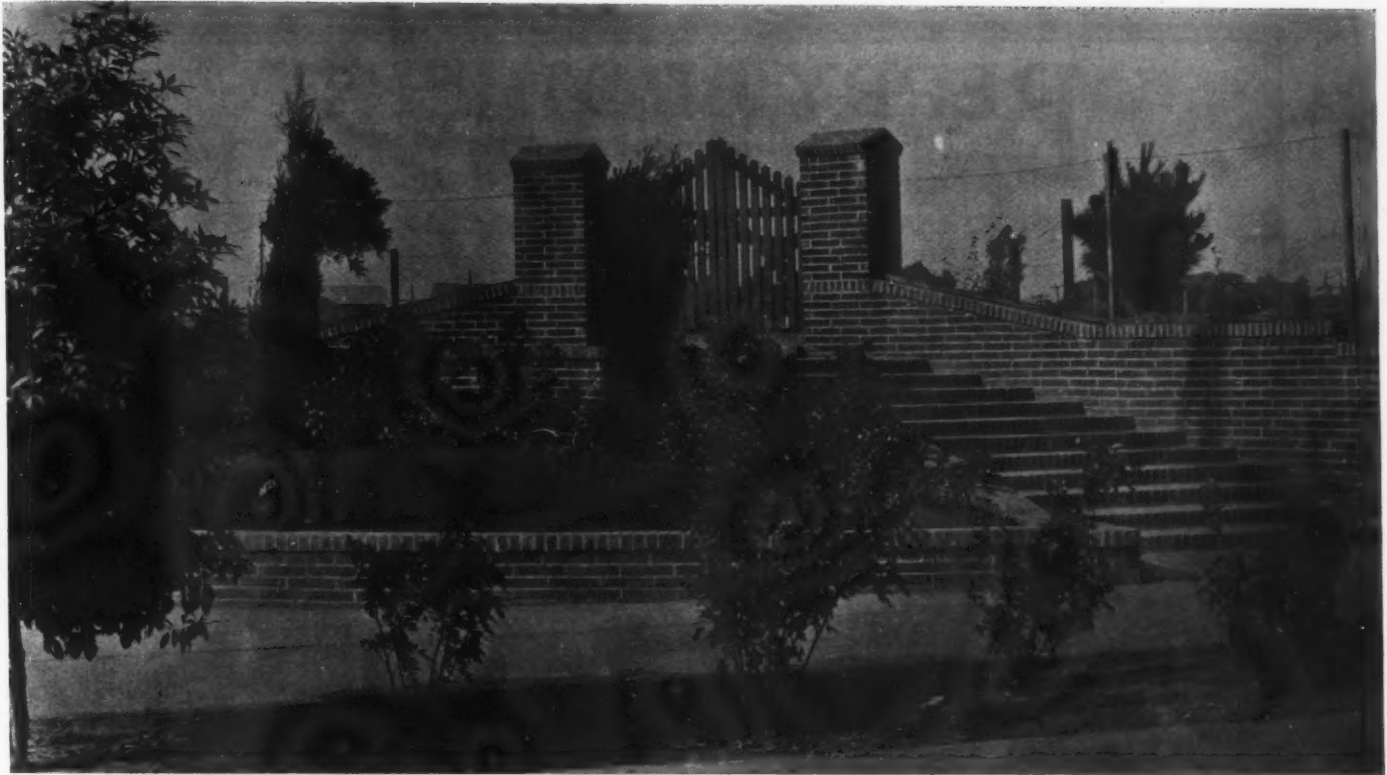
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THE ARCHITECT—Irving F. Morrow, Editor

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ANNOUNCEMENT

THE reconstruction of our plant at Lincoln, California, which was partially destroyed by fire last year, is nearing completion, and we are now in position to accept orders for ARCHITECTURAL TERRA COTTA, ROOFING TILE, HOLLOW TILE and FACE BRICK, for early delivery.

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The ARCHITECT



CHAPEL DETAIL AND ENTRANCE TO LADY CHAPEL
CARMELITE MONASTERY, SANTA CLARA, CAL.
MAGINNIS & WALSH, Architects

CARMELITE CONVENT, SANTA CLARA

By CHARLES D. MAGINNIS

TO express fittingly in terms of architecture the idea of the convent is to engage the most picturesque resources of design. A community of women, whose lives are wholly consecrated to religion, represents a do-

mesticity which calls for unique and delicate expression, with implications both of the church and of the home. Europe furnishes very many examples of the artistic romance of Convent architecture. If the typical con-



SIDE OF LADY CHAPEL
CARMELITE MONASTERY, SANTA CLARA, CAL.
MAGINNIS & WALSH, Architects.



WINDOWS IN CHAPTER ROOM
CARMELITE MONASTERY, SANTA CLARA, CAL.
MAGINNIS & WALSH, Architects.

vent of America has little or nothing of this character; if, on the contrary, it is singularly and perversely a mere cube of masonry whose phlegmatic bulk negatives at once the idea of spirituality and of femininity, it but demonstrates that this particular problem has not yet received from the architect the thoughtful study it deserves.

The new monastery of the Carmelites at Santa Clara, California, is the result of a deliberate effort to

find this architectural solution. The Architects were fortunate in the scene of this effort, to begin with. The traditions of the Carmelite order, associated as they intimately were with the Renaissance of Spain, held implications of singular promise for a setting on a land already so rich in Hispanic suggestion. Something of a hint may be given even in these technical pages that the Carmelites are a cloistered order of an unusual austerity of habit. The hours not devoted to domestic

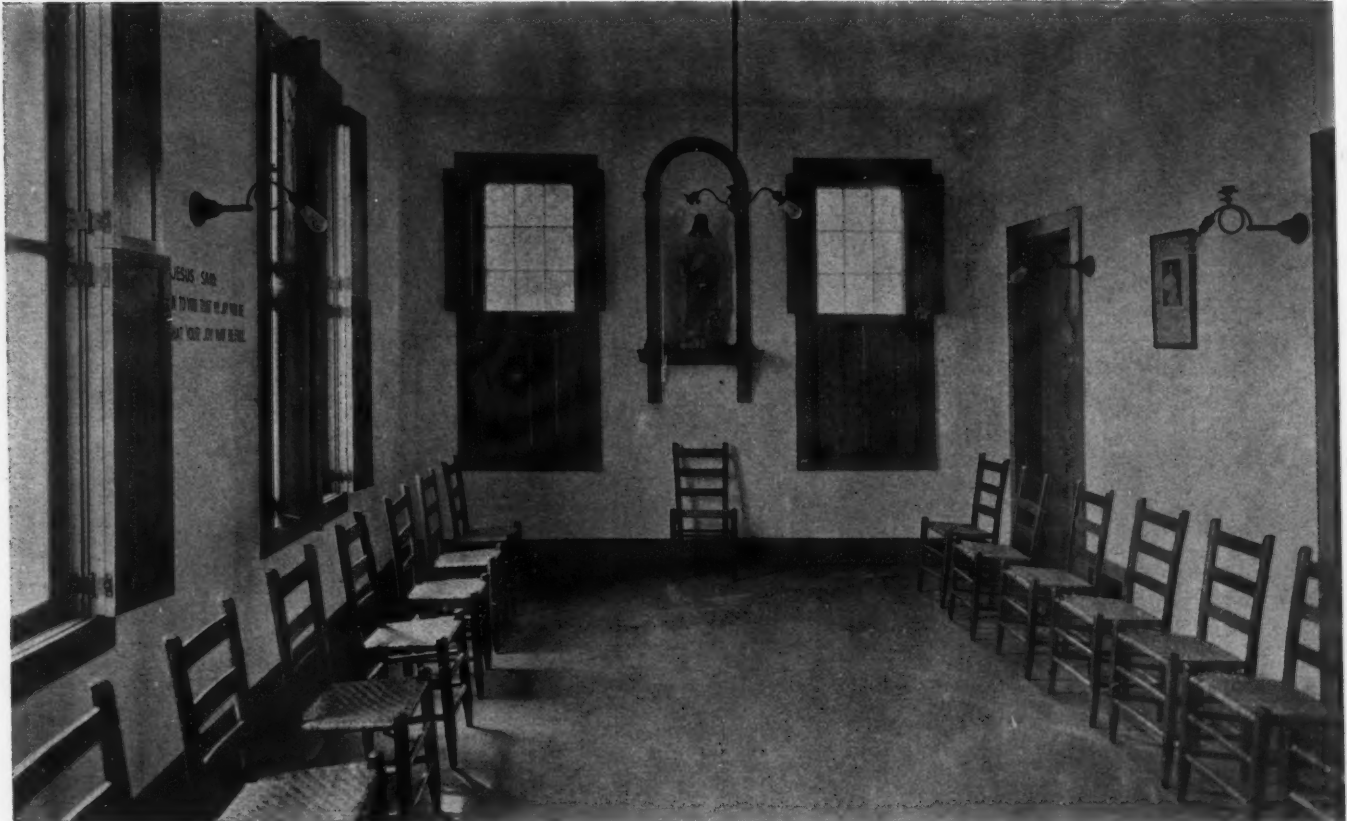


LOGGIA IN CLOISTER
CARMELITE MONASTERY, SANTA CLARA, CAL.
MAGINNIS & WALSH, Architects

duty are given to prayer, contemplation and spiritual exercise.

The obvious importance of the chapel, as the vital center of the Community, has its own suggestion for the architect. The right placing of this chapel is indeed a determining principle in the design, because it must serve at once both the Community and a considerable public, which is attracted by the spiritual ideals of the order. The Community have a personal communication with this public by voice only, the sisters not being visi-

ble. This is accomplished by what is known as the "speak-room," which consists of two apartments (an outer and an inner speak-room) separated by a fixed grille of metal, veiled on the inner side. The "outer speak-rooms" are directly accessible from the public lobby of the convent. In this lobby, conspicuously placed, is the typical Carmelite institution, known as the "turn." A symbol of the dependence of Carmel on the charity of the world (a dependence which is inflexibly of the rule) the "turn" is a revolving cylinder of wood, furnished with shelves, on



WORK ROOM
CARMELITE MONASTERY, SANTA CLARA, CAL.
MAGINNIS & WALSH, Architects

which alms, in food or money, may be conveyed to the community. Other than as has been stated, the organization of the Carmelite Convent is not affected by the public relation.

The Chapel, which dominates the whole architectural composition, is approached from Lincoln Street by a straight avenue which is bounded by one of the claustral walls. As to the general characteristics of the building, as they disclose themselves externally, there is indicated clearly the architects' intention to achieve a spreading composition and a general picturesqueness of effect.

The style chosen is the Spanish Renaissance. There has been no attempt, however, to adhere literally to any particular phase of this tradition. A note of responsible Renaissance character is struck in the chapel, which is the only feature of the Carmelite institution where architectural ornamentation is permitted.

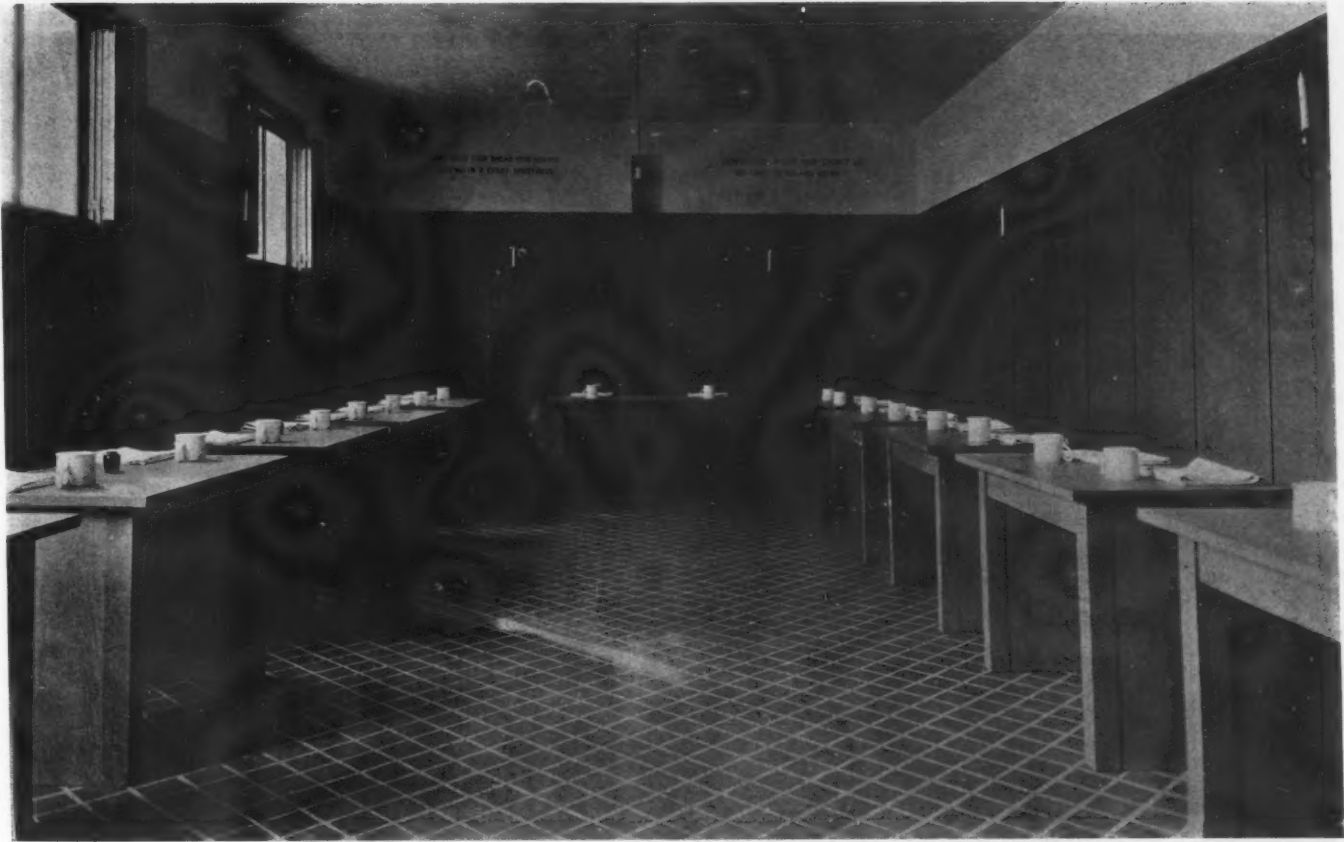
This interesting accent has been made possible because of the salient placing of the chapel, standing, as it does, almost free of the quadrangular plan. By way of interesting reminiscence, certain items of the external design are reproduced from the noted Carmelite Convent at Avila, Spain,—such as the unique belfry. The external effect, in point of color, depends on the highly interesting tile roofs, of beautiful and varied tones, which combine to give an effect of grayish violet at some distance. The walls are a very delicate shade of pink; the trimmings of a light shade of terra cotta thinly enameled.

The chapel, which is approached through a small

vestibule, is 87 feet long and 35 feet wide, including the side aisles. A series of alternating piers and columns supports the lofty clerestory. The roof construction is frankly expressed in interesting truss forms of wood. The floor of the chapel is paved with brick, laid herring-bone. The sanctuary is deep-set and is distinguished by a great gilded reredos. Incorporated in the design of the reredos is a Nativity group, flanked by standing figures of Isaiah and St. John the Baptist, in niches. The two great twisted columns which form an important feature of the reredos have been copied from small antique examples in the possession of Senator Phelan at Montalvo. The altar proper is rendered in Botticino marble with inlays of gilded carving; the floor of the Sanctuary is paved with marble tiles.

Connected with the main chapel, towards the east, is a small octagonal Memorial Chapel, 16 feet in diameter, erected to the foundress. This is finished in Botticino marble, with eight columns at the angles supporting a low dome. On the axis facing the large chapel is the memorial altar of Siena and black Belgium marble. On the pavement, in front of this, is set a large memorial stone with bronze inlaid inscription.

On the east side of the main chapel and accessible from the bay nearest the sanctuary, is the Lady Chapel. This has been planned so that its altar may be approached by the priest without issuing from the main sanctuary, proper provision having been made at the same time for communicating oratories. Prominently placed in the



REFECTORY
CARMELITE MONASTERY, SANTA CLARA, CAL.
MAGINNIS & WALSH, Architects

Lady Chapel is a recessed confessional. The chapel is ceiled by a semicircular vault, Botticino marble lining the walls up to the spring of the arch. Over the altar will be placed, in a niche provided for it, a statue of Our Lady of Mt. Carmel. A niche is provided in the west wall for a figure of St. Veronica.

The plan of the convent, as it develops from the public portion of the institution, is comparatively intricate. In this connection it should be stated that the authorship of the plan is attributable very largely to the community. The architects have been impressed by the singular skill shown in the development of the plan, in view of the interests involved. The convent is arranged to frame a patio, which is approximately 89 feet square, in the center of which is to be placed a fountain of terracotta, surmounted by a little figure of the Infant Saviour. The four sides of the patio are defined by colonnades which frame the well paved walks for the Community. On the corner is provided a tourelle with winding stairs reaching the look-out to the distant hills.

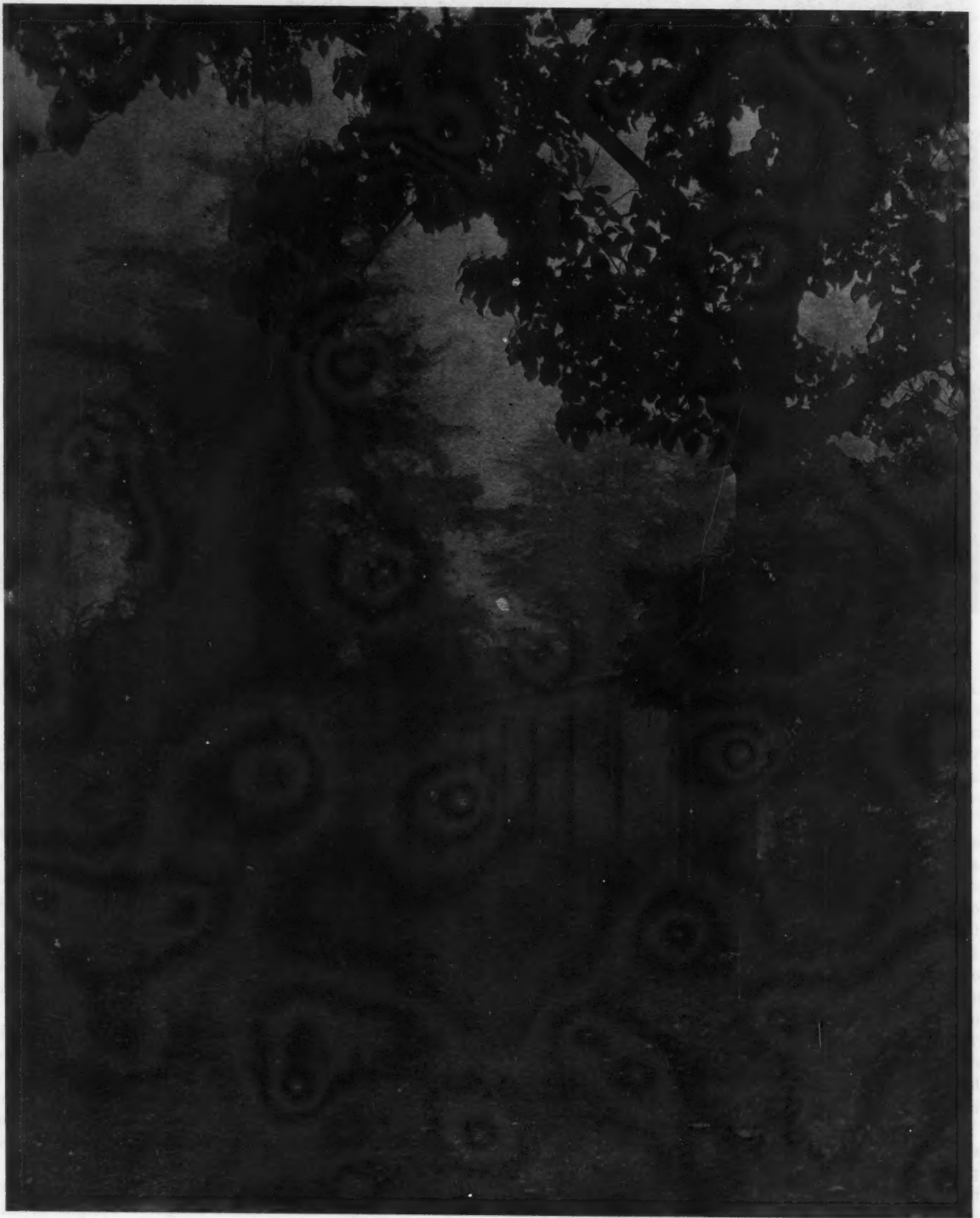
The wing to the north, paralleling Benton Road, is devoted to the public lobby, parlor and inner and outer speak-rooms, and, at the point of junction with the chapel, to the sacristies. Opposite this, to the south, and across the patio, is the domestic wing, connected at its east end with the rear of the chapel by the wing devoted to the Choir and Chapter Room, which are related laterally to the axis of the main chapel.

On the east side is a short pavilion given over to the Infirmary; it is composed of two wards, a refectory and a room for the infirmarian.

The Choir is a paved room of long interesting proportions, with a semi-circular vault, the walls being lined with light brick of warm tone. The grilles on either side of the altar of the main chapel serve to bring the community into relation with the public services. The choir benches are placed longitudinally facing each other in the customary way. A handsome altar of wood is set against the south wall and so disposed to permit the exposition of the Blessed Sacrament. In a panel overhead is set a sculpture in composition in very slight relief of St. John of the Cross and St. Theresa. This apartment is very effectively lighted from windows high up in the vaulted ceiling.

The Chapter Room, which opens by means of double doors from the Choir, is furnished with an altar for relics placed against the south wall, surmounted by a large crucifix, and has seats along the wall as in the Choir. The present altar is of a temporary nature. A recumbent figure of St. Cecilia, the martyr, is to be placed beneath the altar table.

The architects are Maginnis & Walsh of Boston, who were responsible for the complete designs of the building. Representing them, as supervisor of the construction, was Mr. Albert A. Cauldwell, of San Francisco.



VIEW IN GROUNDS OF CARMELITE MONASTERY
SANTA CLARA, CALIFORNIA

RE-EDUCATING THE DISABLED WORKER

By DOUGLAS C. McMURTRIE.*

IN the past our method of dealing with the man permanently disabled in the course of employment has been to pay the worker a pension in the form of compensation, and forget him and his injury. But the cost of disability to the building trade has not been alone in the premiums paid for casualty insurance. There has been the cost involved in the training, experience, and adaptation of a skilled worker who does not return to his job, and the fitting of a newcomer to take his place.

There are three means of reducing and approaching the complete elimination of the cost of disability: first, accident prevention; second, thorough medical attention to minimize the disability resulting from the injury; and third, salvage of the remaining abilities of the worker through rehabilitation for self-support. The first of these has already received wide attention from employers and has wisely been encouraged in a financial way by casualty insurance companies and state funds. The values of the latter two have, however, not as yet been appreciated. Their energetic application would effect a tremendous saving to industry.

Many injuries from which men would completely recover in a short time under adequate and high-grade medical attention are treated for an insufficient time, or by incompetent physicians; and instead of a prompt return to work, the case at best drags along over an extended period and at worst becomes chronic or develops into permanent disability. Some states require the insurance carrier to provide but two weeks of compulsory free medical attention to the injured man. For the insurance company to take advantage of this limitation is the most short sighted policy possible, because for every dollar saved in physicians' or hospital fees, the insurance carrier pays out later ten dollars in compensation. And what the insurance company pays is actually paid by the insuring employers in their regular premiums. Unlimited medical attention of the highest grade should be an axiom of casualty practice. It should be insisted upon by employer and workman alike. The best outcome of any injury is to have the employee return to his job as a well man in the shortest possible time. It is well to develop a science of dealing with cripples, but the ideal is to have fewer cripples with which to deal.

The third method of attack on the cost of disability is rehabilitation for self-support—the re-education of an injured man for an occupation which he can follow, or a process which he can perform, in spite of his handicap. The science of rehabilitation is new, and the experience in it has practically all been gained in the effort to make sound and just provision for the disabled soldier or sailor.

Every country among the recent belligerents is to-day operating a comprehensive system of re-education for disabled soldiers, and is placing upon that system more dependence than upon the pension system.

Paying a man a small monthly or weekly stipend on which he is expected to live in idleness is not a very constructive method. With the breakdown of confidence in the pension system, it was realized that the only real compensation for disablement was restoration of capacity for self-support. It was further realized that very few jobs require all the physical faculties and that in the present-day variety of industrial processes, it is possible to find a job in which a man with a given type of disability can function 100 per cent. efficient. Some jobs are standing, some seated, others require walking about, some jobs at a bench working on small articles require but little strength, others involve great physical exertion. Still others do not require the sense of hearing, in others the sense of sight is not essential. Finding the future work of the disabled man, therefore, requires expert and painstaking choice, but a successful selection is possible even for the seriously handicapped. The first aim is to place the man back in a different job in his own trade or in a trade closely related. In such a job his past experience will stand him in good stead. Failing this, he can be re-trained for a different line.

The process of re-training the disabled is known as re-education, and can best be provided in a special school for crippled men. The first school of this kind in the United States is the Red Cross Institute for Crippled and Disabled Men, established in New York City through the generosity of Jeremiah Milbank. At this school, open to disabled civilians and soldiers alike, six trades are already being taught: artificial limb making, motion picture operating, oxy-acetylene welding, printing, jewelry work, and mechanical drafting. More will be added as the demand develops. Graduates are already giving satisfaction in the jobs to which they have been graduated, so the enterprise has passed the experimental stage. And in the results attained with disabled soldiers abroad there is overwhelming evidence of the logic and practicality of rehabilitation.

The cost of soldier rehabilitation is being met by the United States government and by the governments of some of our allies. It will be admitted without argument as desirable that the advantages of re-education be made available to disabled civilians as well, but will not the cost be prohibitive? The fact is that rehabilitation effects a reduction rather than an increase in the cost of disability to industry or to the community as a whole.

A typical case will illustrate how the saving is effected. A worker in Massachusetts was injured by a fall while working inside a submarine and his hand be-

* Director, Red Cross Institute for Crippled and Disabled Men
23rd Street and Fourth Avenue, New York City.

came permanently crippled. In due course his compensation rate was determined and he was referred to the insurance carrier to be paid ten dollars a week for a long period, with a maximum total payment of four thousand dollars. Since the disability was manifestly permanent the insurance company wrote the case off their books as a four thousand dollar loss and transferred that amount to reserve to cover the weekly payments. After the compensation had been paid for nearly a year, a new official of the insurance company began looking over the list of men to whom the company was paying compensation. His attention was directed to the man in question and the latter was requested to call at the office of the company. The case was like many thousands of others susceptible of rehabilitation for self-support, so the insurance company official put a proposition to the man in very frank terms. "I believe that you can be trained to earn a good living. I want you to understand very clearly, however, that this proposal is to the financial advantage of the company, but I also believe it is to your advantage as well. A total income of ten dollars a week is not very attractive to you and you would probably rather return to work at a good wage than remain idle. If you will consent, the company will send you to a school of re-education and see if we cannot get you back on your feet in good shape." The injured man consented to the proposal and the company sent him to the Red Cross Institute in New York. They began to pay him not ten dollars a week as required by law; but forty dollars a week, twenty to him in New York and twenty to his wife at home. The company also paid liberally his traveling expenses in both directions. In the period of eight weeks he was re-educated in oxy-acetylene cutting and welding and returned home. He is now making not only a satisfactory wage but twice as much as he had ever earned before the accident took place.

In the whole transaction every party at interest was benefitted. The man was advantaged in that his general living standard was distinctly raised, and the necessity of working for his living could not be considered as a hardship. The company paid less than five hundred dollars

for his rehabilitation and this expense in conjunction with the five hundred dollars already paid in weekly compensation during the first year of idleness made a total for the case of one thousand dollars. They were thus enabled to charge three thousand dollars of profit to the account of profit and loss. The community was infinitely the gainer in that the man, formerly an unproductive consumer, became a useful producer instead. The community further gained in the elimination of the disabled man from the category of a prospective dependent, because while compensation might have taken care of him in a very insufficient way during the period of idleness, there would have come a time when compensation ceased and then he would have been in a desperate economic status indeed—confirmed in habits of idleness, untrained for skilled work, and without any source of support.

A more intelligent handling of disability by insurance carriers will, therefore, reduce their expense, and will thus cut the cost of casualty protection to the employer. There is needed also, however, some revision of compensation laws so that there may be definite encouragement to insurance carriers to offer opportunity of re habilitation and definite encouragement to the disabled men to take advantage of it. Practically every compensation case that has ever come to the Red Cross Institute has come on the day his compensation expired. For one year, for two years, or for four years the man has existed in idleness, drawing compensation, and cultivating habits of indolence. When his support was cut off, he then became interested in re-habilitation. Present compensation legislation tends to encourage the man to remain idle because his payments are reduced by any improvement in earning capacity. A revision of this practice will make for more constructive provision.

In short, the first effort should be to prevent injury, the second to minimize its permanent effects, the third—when disability has ensued—to offset its economic consequences. The execution of this complete program is not only sound humanitarian practice—it is good business as well.

WAR MEMORIALS

The following has been issued in a circular by the American Federation of Arts under date of February 24, 1919.

—o—

THE American Federation of Arts on January 2nd, issued a circular letter containing suggestions for the treatment of war memorials. That letter contained the statement that an advisory committee would be appointed, whose services and advice can be placed at the call of those throughout the United States who are considering the erection of war memorials. This committee has now been appointed and announcement of its personnel is made herewith.

The purpose of this committee is to deal with the entire subject of War Memorials in such a way as to afford assistance to officials, commissions and committees who are earnestly endeavoring to make the memorials of the Great War express in a permanently satisfactory manner feelings of honor, sacrifice and patriotism.

The Federation is strongly of the opinion that the American artist should be called on to design and to execute any structural memorials of this war, and that in every community the memorial should be an individual, artistic creation. Too often it has happened that war monuments in the past have taken the form of stone or metal soldiers, with little or no variation in design

THE BUILDING REVIEW

and utterly devoid of artistic feeling and expression—the products of the shop, not the studio.

The Federation expects members of the General Committee to confer with any organization which is about to erect a war memorial, in order to influence the decision in favor of a work having artistic merit, and to acquaint the members of such an organization with the proper methods to be taken in order to secure that result. Pains should be taken to make organizations understand that the Committee is not interested in any particular form of memorial, or in any particular artist or group of artists, the only end in view being a memorial worthy of the community and the cause.

Members of the General Committee may be consulted on the choice among various forms of memorials, and also as to methods of selecting a designer and bringing the work to a satisfactory conclusion. Any person interested in obtaining fitting memorials may write to the Secretary of the General Committee for information touching any phase of the matter. The aim is not to dictate but to be helpful. The Federation is convinced that thoughtful attention at the beginning of the project will bring good results. The enterprise is a great one,—the adequate commemoration of a noble cause by memorials expressing the highest attainments of American art.

PRINCIPLES AND METHODS

For the guidance of its members, as well as of advisers and persons charged with the duty of erecting war memorials, the General Committee of the Federation of Arts has adopted the following principles, which are substantially the same as the one laid down by the National Commission of Fine Arts and approved by the National Academy of Arts and Letters:

Memorials may take many forms, varying with the nature of the site, the amount of money available, the desires and needs of the community. Among many types these may be mentioned:

1. **A Flag Staff With Memorial Base.** The expense may be little or much, according to the simplicity or elaborateness of the base and the extent of the architectural setting. There is one type of staff to be used in connection with buildings, and quite another suited to an isolated situation. There is variety in flags, also. The great, undulating, sumptuous silken folds of the Venetian flags on the piazza of St. Marks are the extreme of art in flags. Something of this kind and quality we may aspire to in decorative flags.

2. **A Fountain,** which may be designed so as to afford places for inscriptions. A fountain may be simple in extreme or most elaborate. It may cost one thousand dollars or tens of thousands. Well placed, it is one of the most permanent of monuments. In European cities fountains are enduring, attractive, useful and distinguished features. Americans are just beginning to realize the possibilities of fountains as memorials.

3. **A Bridge,** which shall get its chief beauty from its graceful proportions and the worthiness of the material used. The bridge should be built to last a thousand years and to be a continuing delight during that period. The memorial features may be furnished either by tablets or sculpture or monuments at the bridge approaches.

4. **A Building,** devoted to high purposes, educational or humanitarian, that whether large or small, costly or inexpensive, would through excellence of design be an example and inspiration to present and future generations, expressive of the refinement

and culture which mark the highest order of civilization. It should, however, be understood that a building entirely utilitarian can not altogether satisfy the desire for a commemorative work of art. The transept of Memorial Hall at Harvard University is an example of the triumph of memorial feeling over utility and even architecture.

5. **Tablets,** whether for out-of-doors, or for the walls of church, city hall, lodge room or other building, offer a wide field for the designer. These tablets get value from the beauty of form and especially from the design of the lettering. The inscription should be designed even to the names of individuals, and should not be made from type kept in stock by the tabletmaker.

6. **Gateways** to parks or other public places afford a fitting and expressive method of commemoration. Here, too, the architect and sculptor may find full play for their fancy.

7. **Symbolic Groups,** either in connection with architecture or isolated, depend for their interest on the universality of the ideas or sentiments depicted and the genius of the sculptor. Success is not impossible; but talent of a high order alone can achieve it.

8. **Portrait Statues** of individuals are a favorite form of commemoration. A portrait statue which is also a work of art is not an impossibility, but it is such a rarity that committees should exhaust other possibilities before settling on this one.

9. **Medals.** To make a good medal is one of the most exacting things an artist can be called upon to do. Properly to execute a medal takes much time and study, even from the most skillful and experienced. It is not the work of the die-maker, or for the artist who works simply on paper, or for a combination of the two. The designing of a medal should be entrusted only to those who have a fine sense of composition, skill in draughtsmanship, and a knowledge of the subtleties of relief. Not only is the space limited, but the range of ideas and motives adapted to relief is limited. People are inclined to ask too much to be told on a medal. While a sketch on paper or a water color may be valuable as a preliminary step, an order to strike the medal should never be given until the design has been developed in relief, as even a very careful drawing may give a false idea of the relief itself.

10. **Stained Glass Windows** offer a field commonly resorted to, and with varying success. The subject is one requiring special study and consideration, and should only be taken up with competent advice.

11. **The Village Green,** which exists in almost every small town or may easily be created. Usually this common is ill-kept and without symmetry of form. It might readily be laid out for playground and park purposes, and so improved and maintained. A fountain with seat carrying an inscription, or a tablet well designed, would form the center of memorial interest.

12. **Other kinds of memorials** (such as bell towers, band stands, memorial doorways and memorial rooms) will suggest themselves. Any form that can be made to express feelings of honor, respect, love of country, devotion to freedom and the glory of the triumph of democracy will be appropriate. If the utilitarian structure shall be used, it is of first importance that it shall impress the beholder by beauty of design, the permanent nature of the material used and the fitness of the setting. What shall be done is less important than the manner in which it is done.

The Professional Adviser.

In any case where it is decided to erect a memorial, the first step for the individual or committee having the matter in charge is to seek the advice of some one trained in the arts to act as an adviser, and to confer with him in regard to

1. **The location,** whether out-of-doors or indoors. If out-of-doors, the site is of prime importance. Crowded thoroughfares are to be avoided. Works of art should not be obstructions to travel, either at the time of erection or prospectively. It should be borne in mind that a work of art is not noticed when placed where crowds continually pass it. People will go a distance to enjoy a masterpiece and, unless a memorial has such distinction as to command attention and admiration, it fails of its purpose.

2. *The type of memorial* is the second subject for consultation with the professional adviser. He should know how to spend the money available in the manner best suited to carry out the purpose intended:
3. *The Selection of the artist* should be made with the assistance of the professional adviser. The site and type of memorial having been determined, the adviser should be able to furnish a list of the artists, whether architects, sculptors or painters, who have established reputations for executing the particular kind of work in view. One of these artists should be selected, after an examination of his completed work, and the commission should be given to him. The adviser should be retained, in order to make sure that the completed work in all particulars (including of course, the inscriptions) conforms to the best standards. No lay committee is competent to pass judgment on these essential elements. Then, too, the adviser should see to it that the landscape or other setting is in harmony with the design, and is calculated to enhance the memorial.
4. *Competitions* are sometimes imperative. In such cases, the professional adviser should draw up the programme and conduct the competition. Artists of high standing often enter competitions limited to selected artists of established reputation; they rarely enter unlimited competitions. In any competition the essential elements are, first, a good programme; and, secondly, competent and impartial judges.

Methods of conducting competitions have been formulated by the American Institute of Architects, the National Sculpture Society, and the National Society of Mural Painters. These methods should be followed by the adviser.

The Character of the Memorial.

The most impressive monument is one which appeals to the imagination alone, which rests not upon its material use but upon its idealism. From such a monument flows the impulse for great and heroic action, for devotion to duty and for love of country. The Arch of Triumph in Paris, the Washington Monument and the Lincoln Memorial are examples of such monuments. They are devoid of practical utility, but they minister to a much higher use; they compel contemplation of the great men and ideals which they commemorate; they elevate the thoughts of all beholders; they arouse and make effective the finest impulses of humanity. They are the visible symbols of the aspirations of the race. The spirit may be the same whether the monument is large or small; a little roadside shrine or cross, a village fountain or a memorial tablet, speaks the same message as the majestic arch or shaft or temple, and both messages will be pure and fine and perhaps equally far-reaching, if the form of that message is appealing and beautiful. Display of wealth, ostentation and over-elaborateness are unbecoming and vulgar. Elegant simplicity, strength with refinement, and a grace of handling that imparts charm are the ends to be sought. These ends require, on the part of everybody connected with the enterprise—committee, adviser and artist—familiarity with the standards of art, and above all, good taste. Only by a combination of all these elements can a really satisfactory result be obtained.

DISCUSSION OF WAR MEMORIALS

At the annual meeting of the American Federation of Arts, to be held at the Metropolitan Museum of Art, New York, on Thursday, Friday and Saturday, May 15, 16, 17, Thursday will be devoted to a discussion of various phases of the subject of war memorials, with illustrations taken from past and present successes and failures in this country and other countries.

GENERAL COMMITTEE ON WAR MEMORIALS

Honorary Chairman, Hon. William H. Taft; Chairman, Charles Moore, Chairman, National Commission of Fine Arts; Vice-Chairman, Robert W. de Forest; President American Federation of Arts, President Metropolitan Museum of Art; Secretary, Leila Mechlin, Secretary, American Federation of Arts; Herbert Adams, New York; Thomas Allen, Boston; Pierce Anderson, Chicago; Henry Bacon, New York; James Barnes, New York; Edwin H. Blashfield, New York; George G. Booth, Detroit, Michigan; Arnold W. Brunner, New York; Charles A. Coolidge, Boston; Andrew W. Crawford, Philadelphia; Walter Denegre, New Orleans; Charles W. Eliot, Cambridge, Mass.; John H. Finley, Albany, N. Y.; Daniel C. French, New York; Cass Gilbert, New York; Charles Grafly, Philadelphia; Morris Gray, Boston; Arthur A. Hamerschlag, Pittsburgh; Myron T. Herrick, Cleveland, Ohio; Charles L. Hutchinson, Chicago; Francis C. Jones, New York; Otto H. Kahn, New York; George E. Kessler, St. Louis, Mo.; William M. Ladd, Portland, Ore.; Samuel Mather, Cleveland, Ohio; Charles C. Moore, San Francisco; Charles D. Norton, New York; Frederick Law Olmsted, Brookline, Mass.; James D. Phelan, U. S. Senate, Washington, D. C.; Elihu Root, New York; James L. Slayden, House of Representatives, Washington, D. C.; Lorado Taft, Chicago; John R. Van Derlip, Minneapolis Institute of Fine Arts, Minneapolis, Minn.; Joseph E. Widener, Philadelphia; Ansley Wilcox, Buffalo, N. Y.

In addition to the General Committee named above there are special Regional Sub-committees and a list of professional advisors for the aid and convenience of those in different parts of the country who wish specific and professional advice.

For the names of Chairmen of these Sub-committees and professional advisors application should be made to the Secretary of the General Committee to whom all communications on this subject may be addressed.

Suggestions with reference to different forms of suitable memorials may also be sent to Miss Leila Mechlin, Secretary, 1741 New York Avenue, Washington, D. C.

The illustrations of the Carmelite Monastery at Santa Clara, California, Maginnis & Walsh, architects, form the second installment of material dealing with this building. The first installment appeared in *The Architect* for February-March, 1919.

Miss Gertrude E. Comfort, architect, announces the removal of her office to Room 908, French-American Bank Building, 110 Sutter Street, San Francisco, Calif.

The Electric Vacuum Cleaner Company, Inc., has been incorporated with principal offices in Cleveland, Ohio, and New York. The new concern is a consolidation of the business and manufacturing facilities of the Frantz-Premier Co. of Cleveland and the vacuum cleaner business of the Edison Electric Appliance Co. of Chicago. It will be devoted to the manufacture and sale of electric vacuum cleaners (including stationary and portable types). It is understood it will equip its output with General Electric Motors. The present local service stations maintained by the Frantz-Premier Co. will be extended and developed to give complete service to users of products of the new concern.

Official News of Pacific Coast Chapters, A. I. A.

The regular minutes of meetings of all Pacific Coast Chapters of the American Institute of Architects are published on this page each month.

San Francisco Chapter, 1881—President, Sylvain Schnaittacher, 333 Post Street, San Francisco, Cal.; Secretary, Morris M. Bruce, Flood Building, San Francisco, Cal. Chairman of Committee on Public Information, William B. Faville, Balboa Building, San Francisco. Chairman of Committee on Competition, William Mooser, Nevada Bank Building, San Francisco. Date of Meetings, third Thursday of every month; Annual, October.

Southern California Chapter, 1894—President, H. M. Patterson, 324 O. T. Johnson Building, Los Angeles, Cal. Secretary, H. F. Withey, 621 Exchange Building, Los Angeles, Cal. Chairman of Committee on Public Information, J. E. Allison, 1405 Hibernian Building, Los Angeles. Date of Meetings, second Tuesday, except July and August, at Los Angeles.

Oregon Chapter, 1911—President, Joseph Jacobberger, Board of Trade Building, Portland, Ore. Secretary, Alfred H. Smith, Board of Trade Building, Portland, Ore. Chairman of Committee on Public Information, Ellis F. Lawrence, Chamber of Commerce Building, Portland, Ore. Date of Meetings, third Thursday of every month at Portland; Annual, October.



Washington State Chapter, 1894—President, Daniel R. Huntington, Seattle, First Vice-President, Carl Gould, Seattle, Second Vice-President, George Gove. Third vice-President, Albert Held, Spokane, Secretary, Louis Baeder, Seattle. Treasurer, Frank L. Baker, Seattle. Counsels: Chas. H. Bebb, Sherwood D. Ford, and G. C. Field. Date of Meeting, first Wednesday, except July, August and September, at Seattle, except one in Spring at Tacoma. Annual, November.

The American Institute of Architects—The Octagon, Washington, D. C. Officers for 1918: President, Thomas R. Kimball, Omaha, Neb.; First Vice-President, Charles A. Favrot, New Orleans, La.; Second Vice-President, George S. Mills, Toledo, Ohio; Secretary, William Stanley Baker, Boston, Mass.; Treasurer, D. Everett Waid, New York, N. Y.

Directors for Three Years—Edward W. Donn, Jr., Washington, D. C.; Robert D. Kohn, New York, N. Y.; Richard Schmidt, Chicago, Ill. **Directors for Two Years**—William B. Faville, San Francisco, Cal.; Burt L. Fenner, New York, N. Y.; Ellis F. Lawrence, Portland, Ore. **Directors for One Year**—Edwin H. Brown, Minneapolis, Minn.; Ben L. Lubschez, Kansas City, Mo.; Horace Wells Sellers, Philadelphia, Pa.

Minutes of San Francisco Chapter

MARCH 20th, 1919.

The regular monthly meeting of the San Francisco Chapter of the American Institute of Architects was held at the Plaza Hotel, Post and Stockton Streets on Thursday evening at 6:30. The meeting was called to order by the President, Mr. Sylvain Schnaittacher at 7:30 p. m.

Members present were:

Messrs. Morris M. Bruce, Leo J. Devlin, Albert Farr, W. B. Faville, B. J. Joseph, Wm. C. Hays, James A. Magee, Wm. Mooser, Mathew O'Brien, Sylvain Schnaittacher and Arthur G. Scholz.

MINUTES

The Minutes of the regular meeting held on February 20th, 1919 and of the Special Meeting held on March 13th, 1919, were read and approved.

UNFINISHED BUSINESS.

There was no unfinished business.

REPORTS OF STANDING COMMITTEES.

San Francisco Sub-Committee on Competitions—No report.
Practice—No report.

Building Laws—A resolution from the Board of Directors of the General Contractors' Association was received; also copy of the items which were discussed at the joint meeting with the Board of Directors of this Chapter held on March 5th, 1919.

Legislation—A communication from Mr. J. J. Donovan, Chairman of this committee was received, a copy of which was sent to Senator Sample at Sacramento, California in re Senate Bill No. 166.

Public Information—No report.

Education—No report.

Entertainment—No report.

Library of San Francisco Architectural Club—No report.

SPECIAL COMMITTEES.

Collection of Delinquent Dues—No report.

Building Material Exhibit—No report.

Committee on Combining Quarters with San Francisco Architectural Club—No report.

Materials and Specifications—No report.

GENERAL BUSINESS.

Communications—From Mr. William Binder in re plans for Mayfield Town Hall; From Mr. J. J. Donovan in re Senate Bill No. 166; From San Francisco War Camp Community Service in re memorial buildings, also a circular from the American Federation of Arts on the same subject; From the San Francisco Chamber of Commerce thanking the Chapter for its prompt and earnest co-operation in the defeat of bill prohibiting the use of machines in spraying paint.

With reference to the circular from the American Federation of Arts the following resolution was offered, seconded and carried.

"RESOLVED that the San Francisco Chapter, American Institute of Architects hereby endorses the opinion and sentiment of the American Federation of Arts as expressed in the Circular on War Memorials issued on February 24th and will co-operate to these ends with the Federation and any of the other bodies interested so that the spirit of the circular may be carried out and that a copy be sent to the San Francisco War Memorial Committee, the San Francisco War Camp Community Service and the American Federation of Arts."

The reports of sub-committees to consider the questionnaire sent out by the Post War Committee of the Institute were read and discussed and on motion of Mr. Faville, duly seconded and carried, it was decided to send such answers as he had returned by the sub-committee to the Post War Committees as a progress report and that copies be sent to all members, to the other Coast Chapters and to all other architects practicing in northern California.

On motion of Mr. Magee, duly made, seconded and carried, the following resolution was adopted:

"WHEREAS the Chapter is vitally interested in the efficiency of the teaching force in our public schools and that the present salaries of teachers are inadequate, be it

RESOLVED that the Chapter recommends that the teachers' salaries should be increased."

On March 5th, 1919, the Board of Directors met with members of the General Contractors' Association at the invitation of the latter to consider certain matters of mutual interest. After discussion of an informal report by the Directors, the Chapter expressed itself as follows in relation to the various subjects discussed.

The suggestion of a permanent Arbitration Board for the

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settlement of disputes between members of the Chapter and of the Association was approved, but not to be made obligatory.

The proposal to open bids in public was generally approved as tending to eliminate many troubles.

The method of obtaining estimates on refigured work by giving preference to the low bidder at the first figuring was not approved unless modified.

There was general assent to the proposal that the members of the Chapter and Association would profit by better feeling and closer acquaintance.

A resolution thanking the General Contractors' Association for their invitation and the resulting discussion was duly made, seconded and carried.

ADJOURNMENT.

There being no further business before the Chapter, the meeting adjourned at 10:10 p. m.

Subject to approval _____ 1919,

MORRIS M. BRUCE, Secretary.

Minutes of Southern California Chapter

FEBRUARY 11th, 1919.

The One Hundred and twenty-third regular meeting of the Southern California Chapter, A. I. A. was held at Hoffman's Cafe, 215 South Spring street, Tuesday evening, February 11th.

The meeting was called to order by the president, Mr. H. M. Patterson, the following members being present:

J. E. Allison, J. J. Backus, G. E. Bergstrom, S. O. Clements, Walter E. Erkes, Elmer Grey, Myron Hunt, R. G. Hubby, J. P. Krempel, S. T. Norton, Robert H. Orr, John Parkinson, H. M. Patterson, Alfred W. Rea and H. F. Withey.

As guests of the Chapter were present: Mr. Perry Sawyer, representing the Building Trades Development Committee; Mr. George Gove, Architect of Tacoma, Washington, and Mr. W. Dellamore, of the Southwest Builder and Contractor.

Minutes of the 122nd meeting were read and approved.

Under Committee Reports, Mr. Krempel for the Committee on "Contracts and Specifications" stated that he had been in consultation with Mr. Weeks of Seattle upon the subject of Quantity Surveying, and suggesting that it might be of interest to members if Mr. Weeks were invited to attend a meeting of the Chapter in the near future.

For the Committee on "City Planning," Mr. Withey reported that Mayor Woodman was expected to appoint a "Civic Center Committee" within the next few days, and it was expected three or more architects would be chosen to serve on that committee.

For the Committee on "Competitions" the Secretary reported that the Committee had been in consultation with the Supervisors of the County of Santa Barbara relative to the proposed Competition for a Courthouse; that information had been given out that the Competition was to be held, and the Committee hoped to have the program made in compliance with the Institute rules.

Mr. Bergstrom, for the Committee on "Permanent Legislation," reported having attended meetings of the Joint Committee of the Technical Societies within the past few days, when the proposed State Licensing Law for Engineers was being discussed. The Committee's recommendation to the Chapter was not to endorse the bill in its present form, thereupon it was moved by Mr. Krempel, seconded by Mr. Norton and duly carried, that the Chapter endorse the action of the Technical Societies in opposing the passage of the bill in its present form. It was further moved by Mr. Norton, seconded by Mr. Grey and duly carried, that the Legislative Committee keep in touch with the status of this Bill, and for any necessary expense involved, that the Committee be allowed the maximum of \$25.

Mr. Bergstrom further stated that his Committee had been taking up and considering the various Bills that are now before the State Legislature, and the Committee's suggestion is, that with the exception of two Bills, the Chapter recommend that these measures be not passed, and that a letter be written by the Secretary to each Assemblyman and Senator, said letter to be signed by both the Secretary and President.

Of these proposed measures it was moved, seconded, and duly carried, that the Chapter endorse Senate Bills No. 367 and 617, for "Prohibiting the use of cut-offs, etc." and "Tenement Houses" respectively, and that the following be not endorsed:

ASSEMBLY BILLS.

No. 142, Unnecessary Sunday Labor; No. 441, Regulation of Sale of Paints, etc.; No. 673, Eight Hour Working Day; No. 709, Tools Operated by Compressed Air; No. 793, Licensing Painters; No. 795, Tenement Houses; No. 850, Adulteration of Paints.

SENATE BILLS.

No. 77, Unnecessary Sunday Labor; No. 274, Material Men's Protection; No. 324, Examining Plumbers; No. 344, Material Men's Protection; No. 372, Workmen's Protection; No. 393, Building and Altering; No. 570, Inspection of Electric Wiring; No. 416, Hotel Regulations; No. 576, Public Welfare; No. 506, Size of Brick; No. 613, Material Men's Claims; No. 517, Tenement Houses; No. 518, Licensing Painters; No. 533, Forfeiture of Claims; No. 546, Buildings; No. 569, Inspection of Boilers.

Mr. Allison for the Committee on "Public Information" reported having met with the Joint Committee of the Technical Societies, and taking up with them the method and means of obtaining employment for the returned soldiers.

Under "Unfinished Business" the Secretary stated that the matter of selecting delegates to the Annual Institute Convention to be held in April should now receive consideration, and accordingly the following names were offered:

S. T. Norton, nominated by Messrs. Krempel and Allison; J. E. Allison, nominated by Messrs. Parkinson and Krempel; Lyman Farwell, nominated by Messrs. Backus and Grey; Myron Hunt, nominated by Messrs. Withey and Allison; G. E. Bergstrom, nominated by Messrs. Backus and Parkinson; John Parkinson, nominated by Messrs. Krempel and Grey. For Alternates: J. E. Krempel, nominated by Messrs. Backus and Parkinson; Elmer Grey, nominated by Messrs. Orr and Allison; J. J. Backus, nominated by Messrs. Krempel and Allison; R. G. Hubby, nominated by Messrs. Backus and Krempel; W. J. Dodd, nominated by Messrs. Parkinson and Krempel; J. C. Austin, nominated by Messrs. Backus and Allison.

Under "Communications" the Secretary read a card of acknowledgement from Mr. Octavius Morgan for the flowers recently sent to his wife's funeral.

Under "Papers and Discussions" the President introduced Mr. Perry Sawyer, who spoke at some length on the subject of building conditions and future prospects of the country, and California in particular. A general discussion followed, at the close of which Mr. Grey spoke of an experience he had had recently in consultation with a representative of one of the local building companies.

Mr. Gove was next introduced, and gave a short talk on Chapter activities in the Washington State Chapter.

There being no further business, the meeting adjourned at 9:40, with the president expressing the Chapter's thanks to the guests for their presence.

H. F. WITHEY, Secretary.

MEETING OF MARCH 11th, 1919.

The One Hundred and twenty-fourth regular meeting of the Southern California Chapter, A. I. A. was held at the Jonathan Club, 6th and Main Streets, Tuesday evening, March 11, 1919.

The meeting was called to order by the president, Mr. H. M. Patterson at 6:30 p. m. the following members being present:

J. J. Backus, Lyman Farwell, R. G. Hubby, J. P. Krempel, Robert H. Orr, H. M. Patterson, Alfred W. Rea, A. Wackerbarth, H. F. Withey.

As guest of the Chapter was present Mr. Henry Rosenthal, of Cincinnati, Editor of the "Building and Loan Association News."

In compliance with the president's request, Mr. Farwell took the chair for the evening.

Minutes of the 123rd meeting were read and approved.

For the Executive Committee, the Secretary reported a meeting held previous to this meeting, at which the following letters were read:

From Mr. E. C. Kemper, Executive Secretary of the Institute, stating that Mr. Summer Hunt's and Mr. J. C. Hillman's membership in the Institute were discontinued.

From Mr. T. C. Roberts, architect of Clarkdale, Arizona, reaffirming his desire to become a member of the Chapter, and requesting that his application for membership be put thru.

From Mr. Garrett van Belt, Jr., stating that S. B. Marston

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is still in France in "Y" service for the year, and requesting a remission of his dues during his absence.

Under "Committee Reports" the following were given:

For "City Planning" Mr. Withey reported that the Mayor had appointed a Civic Center Committee for the purpose of studying the problem and making a recommendation to the Mayor and Council for the establishment of a Civic Center for Los Angeles. Although the Mayor had agreed to place three architects on this Commission, none were included in the final appointment: That the President of the Chapter had written a letter to the Mayor regretting he had not seen fit to include Architects in this appointment; nevertheless offering the services of the Chapter insofar as the Mayor might see fit to call upon it. Mr. Withey added in conclusion that the Chapter Committee was closely following the work of the Civic Center Committee and would shortly offer some suggestions, to bring to their attention the interest the Chapter has in this matter.

For the Committee on "Competitions," Mr. Orr reported that the Committee had approved the Competition Program for the Santa Barbara County Courthouse.

For the Committee on "Permanent Legislation," Mr. Backus reported that the Committee had met with the Joint Committee of the Technical Societies for further discussion of the proposed Licensing Law for Engineers, and that the matter stood as reported at the last Meeting.

The Secretary read a letter from the Secretary of the Joint Committee of the Technical Societies, which briefly was to the effect that the proposed law is entirely unsatisfactory and urges that the measure be not passed at this session of the Legislature.

Mr. Patterson reported a meeting on Wednesday, March 5th, of several members of the Chapter with Mr. Bert L. Fenner, one of the Institute Directors, at which was talked over matters concerning the work of the Post-War Committee of the Institute. There was also present at this meeting Mr. Schnaittacher, president of the San Francisco Chapter, and Mr. Johnson of the Washington State Chapter.

Under "Unfinished Business," Mr. Farwell recommended changes in certain of the State Laws. The President referred these suggestions to the Committee on "Permanent Legislation" with power to act on the same.

Under the subject of "Debates," Mr. Rosenthal was introduced and spoke interestingly and at length on "National Housing" after which those present took part in a general discussion on the subject.

The meeting adjourned at 9:30.

H. F. WITHEY, Secretary.

Minutes of Washington State Chapter

Minutes of 241st meeting, held March 5th, 1919, at 6:00 p. m., at the Blue Bird Cafe. The following members were present:

President, Huntington; Messrs. Baeder, Baker, Bebb, Brust, Field, Ford, Gould, Jacobs, Loveless, Mann, Myers, Park, Richardson, Schack, Siebrand, Svarz, Wilcox.

Guests present were: Messrs. Wilder, McGonigle, Hope and Rankin.

The minutes of the preceding meeting of February 5, 1919, were read and approved.

Report of resolution offered and approved by Building Officials' Conference was read. Mr. Gould moved the adoption of the resolution. Motion seconded and carried.

The report of the Committee of Chapter Branch Groups, carrying the approval of the Executive Committee was read. Mr. Richardson moved the adoption of the report. Motion seconded and carried. The report of the Committee follows:

"Under the existing Constitution and By-laws of the Chapter we recommend that a provision be made for the formation of local groups of not less than five members in Tacoma and Spokane, to be known as the Tacoma or Spokane Group of the Washington State Chapter, A. I. A. The members of these groups to consist of Associate members of the Washington State Chapter and members of the American Institute of Architects residing in the above mentioned districts. These local groups may also associate with themselves a probationary class of members, which shall be obliged to become Associate Chapter members within one year. This probationary class shall have no voice in Chapter business or right to use of the title. We would recommend the remission of initiation fees for members applying for Associate Membership in the Chapter through these groups for a period of six months from March 1, 1919, and a reduction of dues to the members of these groups to \$5.00 per annum.

ALBERTSON, BAEDER,
BORHEK, LOVELESS,
SIEBRAND, FIELD, Chairman."

Committee Reports.

Education: Mr. Gould in speaking brought to the attention of the Chapter the availability of a room at the University which could be used for the Beaux Arts projects in connection with the local architectural club and asked that the young draughtsmen be encouraged to organize with this in view.

Programme: The President asked this Committee to assume charge of the Chapter meetings. Mr. Richardson as Chairman agreed to call a meeting of the Committee for the purpose.

Ways and Means: Mr. Baker spoke of his work with Messrs. Perrine and Campbell for publicity and reported that they had no definite programme to offer; and that being true, nothing will be done. Mr. Bobb moved acceptance of the report.

Special Committee Reports:

Capital Group Plans: Before calling on Mr. Bebb, the Chairman asked Mr. Wilder to lay before the Chapter the situation relative to the Capital Group. He spoke of the involved situation due to the illness of Governor Lister, and reported the interview had in his office with Acting Governor Hart, Senator Carlyon, Mr. Bebb and himself present.

Mr. Bebb when called upon, spoke in detail of this interview, the substance of which is that Acting Governor Hart is very favorable to our point of view and that Governor Lister seems to have receded somewhat from his previous stand, and may yet be led to accept our views.

Mr. Wilcox moved that a Committee for Capital Group Plans be appointed. Motion seconded and carried.

The report of the War Memorial Committee was made by Mr. Gould, which embraced the crystallization of public thought into the idea of a Civic Auditorium as a memorial and the definite location of the same. He then presented the plan as offered by the Chapter locating the Auditorium on the site the center of which would be approximately Fifth Avenue and Blanchard Street, with the west front on the east side of Fifth Avenue, as concurred in by the Joint Memorial Committee.

Mr. Wilcox moved the approval and adoption of the report. Motion seconded and carried.

Mr. Bebb spoke of the Civic Center in connection with the Memorial asking that it be considered with it. Mr. Huntington answered by saying the Committee had discussed this and had decided to defer the matter for the time being.

Mr. Wilcox was called upon to introduce the subject for the Post War Committee. Outlining briefly the long programme being considered, he concluded by calling upon Mr. Huntington whose subject was "Definition of Architect, and is He Essential." He clearly showed that by reason of his work increasing the financial value of the work, he was necessary.

Mr. Field's subject "Charges" was exhaustively entered into, the substance being that the present system is not fair in all instances, and presented for consideration the change making charges on the basis of fixed fee plus the cost of production, the fee being approximately one-half the present fee, or (3%) three per cent.

Mr. Wilcox moved the adoption as the sense of the Chapter. Motion seconded and carried.

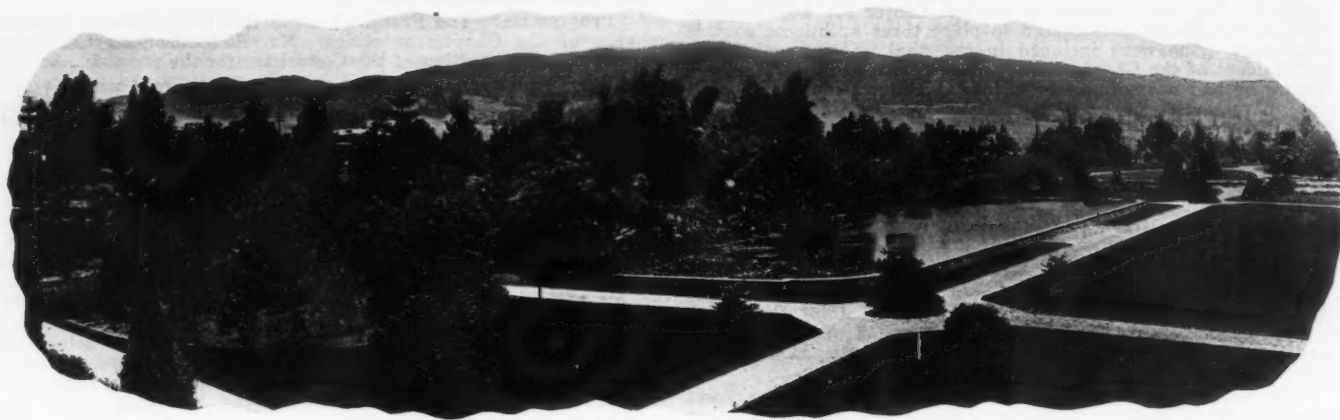
Mr. Baeder's subject, "General Contracts." After speaking of the impracticability of the Architect, his report led into the subject of General Contracts as opposed to Sub-contracts, the system in operation twenty to thirty years ago, and he favored a return to the latter system. This seemed the sense of the Chapter after a discussion. Mr. Gould then moved the adoption as the sense of the Chapter. Motion seconded and carried.

It was the sense of the meeting that foregoing Post War subjects as adopted be forwarded to the Institute Post War Committee for their consideration and adoption.

Meeting adjourned.

The firm of Woods, Huddart & Gunn has been incorporated under the name of Gunn, Carle & Co. Mr. C. C. Carle, succeeding Mr. Huddart, who died in January last, has been in the employ of the firm for the past ten years as structural engineer and salesman. The business will be conducted as heretofore, but on a larger scale. In addition to iron and steel products, electric furnaces, cranes, industrial trucks, plant equipment and supplies will be furnished.

The GARDEN



"NATURE DOES NOT CAPRICIOUSLY SCATTER HER SECRETS AS GOLDEN GIFTS TO LAZY PETS AND LUXURIOUS DARLINGS, BUT IMPOSES TASKS WHEN SHE PRESENTS OPPORTUNITIES, AND UPLIFTS HIM WHOM SHE WOULD INFORM. THE APPLE THAT SHE DROPS AT THE FEET OF NEWTON IS BUT A COY INVITATION TO FOLLOW HER TO THE SKIES."—E. P. WHIPPLE.

Only to those with the eye to see does Nature unfold the wonders of Her exquisite artistry, manifested in the verdant hills, the stately forests, and the radiant flowers. Only those with the mind to comprehend does She call into communion with Her. To be

inspired to the fullest, we must know Her; and in that never-ending quest for knowledge, must perform the tasks She imposes. Thus does She play the part of teacher.

By Her guidance only can we aspire to a Religion of Life, a comprehension of our fellow plants and animals. Merely to see, is a ray of light on the path. To avail one's self of Her secrets is the stepping stone to knowledge. To unite hand and knowledge to the end of nourishing and revealing Her potential beauties to the fullness of life is truly living. To the man in the garden is offered this wondrous intimacy with Nature. Who would not be Her confidant!—W. C. T.

LAWNS, THEIR MAKING AND MAINTENANCE

By PROF. J. W. GREGG

Professor of Landscape Gardening, University of California.

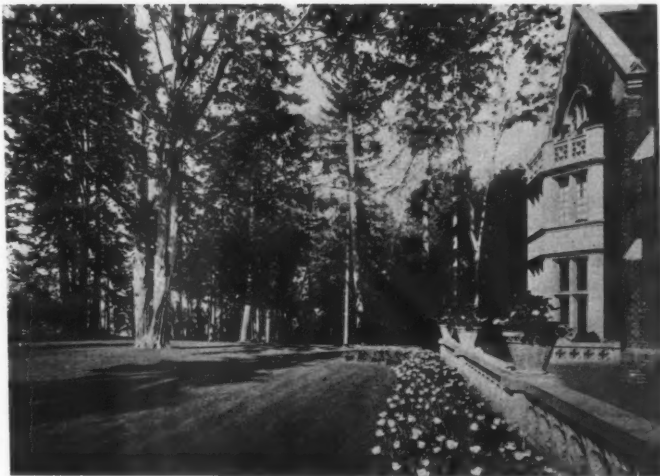
IN California, with such a wide range of soil and climatic conditions, and the extremes of moisture and drought, lawn making has been a much neglected phase of gardening. It is the prevailing opinion that good lawns are expensive luxuries, both in construction and maintenance, and that the same area would give greater satisfaction at less cost if it were devoted to the growing of flowering plants. It is true that with many soils in California, the first cost of lawn construction often appears more or less prohibitive to the average home owner. When it is remembered, however, that a lawn once well made is the foundation of perfect home grounds, and that it requires no more general care than various flowering plants grown to perfection in the same area, and that it furnishes a soft, rich carpet of green upon which one may walk, romp, sit, or recline at ease, the many advantages and comforts of lawns will be appreciated and the first cost and after care will appear trifling.

Because the lawn is such an important feature of home grounds, no mistake should be made in its construction. Shrubs and trees may be transplanted, flower borders may be rearranged every year with comparatively

little trouble and expense, but the making of a lawn is of far greater importance, and all the failures and discouragements, no matter what the after care has been, can be traced directly back to poor, haphazard first construction.

The first thing to do in making a new lawn is to put the soil into proper condition to receive the seed. More lawn failures are due to insufficient preparation of the soil than to all other causes combined. No intelligent man would try to grow grass upon a cement sidewalk, yet grass seed is often sown on hard, packed ground, offering just as little chance to take root, and is expected to grow luxuriantly, with little or no care. If the soil is poor and of a sandy, clayey, or adobe nature, and a good rich loam is not available, satisfactory results may be obtained by spading in a liberal quantity of stable manure. Lawn grasses are voracious feeders and for that reason it is desirable to have at least eight or ten inches of good rich soil.

If the soil is coarse or contains red or yellow clay, it should be thoroughly worked to a depth of from twelve to fifteen inches or more, and should be well mixed with a



A GREEN CARPET 'NEATH SHADE TREES LENDS A REFINED TOUCH TO THE COUNTRY HOME.



IN SUBURB OR CITY A LAWN IN THE FOREGROUND INTENSIFIES THE BEAUTY OF THE HOME.

liberal amount of the best manure obtainable. Unevenness in soil texture and fertility produces unevenness in the growth and color of the lawn grasses, even to the extent of grass dying in patches. Oftentimes where there is much rock or hardpan existing near the surface, the sub-soil should be broken by the use of dynamite. Many soils are also greatly improved by the addition of lime, which loosens up heavy soils, renders plant food more available, and makes sour soils sweet. Preparing soils in this thorough manner permits the roots of grass plants to penetrate to a greater depth where it is cool and moist, and insures a strong, vigorous growth and produces a close, compact turf which better resists drought, severe heat, and hard usage.

The next operation is sowing the seed. This is usually done by hand, using about one pound of seed to two hundred square feet of lawn area. This heavy sowing is better than a thin sowing because many weed plants are crowded out by a good thick stand of lawn grass. The seed is sown evenly when the wind is not blowing and lightly raked into the surface. If the soil is of a light, sandy nature, a good rolling will tend to press the soil around the seed and promote even germination. With heavy clay or adobe soil, care should be taken in the use of the roller, either rolling very lightly or not at all.

In many sections of California, mulching the lawn after sowing the seed is a very desirable and oftentimes a necessary practice. The material used for such mulching should be quite fine and light in weight. Old, well-rotted and finely divided stable manure, as free from weed seeds as possible, is generally used and applied lightly over the surface. After the mulch is applied a thorough watering may be given and the soil kept moist by daily watering until the seed germinates. As soon as the grass is tall enough to be clipped, the lawn mower should be used. This early clipping tends to check the top growth of the young grass plants, and encourages them to make roots, thus producing a firm sod. After the first clipping a good rolling will tend to smooth the

surface and promote better growth. Lawns should be watered thoroughly about two or three times a week during dry weather, preferably in the evening. Light surface sprinklings for a few minutes every evening are worse than nothing, and waste water.

The grasses now being used for lawn making in California are mixtures of Kentucky blue-grass (*Poa pratensis*) Australian Rye grass (*Lolium perenne*) and white clover (*Trifolium repens*). While the basis of all lawn grass mixtures is usually Kentucky blue-grass, some mixtures consist of one-half Kentucky blue-grass, and one-half Australian Rye grass, with possibly a little white clover added. Whether lawns should be seeded with Kentucky blue-grass alone, or with some of the various mixtures, is a question upon which there is a great variety of opinion. It is generally conceded, however, that Kentucky blue-grass should be used either alone, for the best permanent lawns, or with a little white clover added; two parts of Kentucky blue-grass to one part of clover being a good proportion, although equal parts of each variety are often used.

Good results may be expected when Kentucky blue-grass lawns are established in the middle and northern counties during April and May, or immediately after the cold rains are past, but in the southern part of the state, lawns may be made earlier. Early autumn or early spring are the two most favorable seasons, however.

Lawns should not be clipped too short during the hottest and driest months of the year. The knives of the machine should be set high and the short, fine clippings thus produced may be allowed to remain on the lawn where they will quickly work down around the grass plants, and produce a mulch that conserves moisture and protects the crown of the plants from extreme heat. If the grass is allowed to grow too long before cutting, and a large amount of clippings are produced, they are better raked off and taken away.

Weeds will usually give considerable trouble, especially in new lawns, and very often in old ones, and

(Continued on Page 19)

EDITORIAL

WHAT William James termed the will to believe is eloquently exemplified in the building world today. No available evidence would seem to indicate that the industry has to date re-acted very substantially from the depression and the artificial restrictions of war time; yet on all sides we are greeted not only by confidence, but by an aggressive faith which at times might almost be described as a grim determination. The state of mind has both its pathetic and its humorous phases; yet in a large way there can be no doubt that it is psychologically sound, and that such an attitude, when thus prevalent and persistent, helps to create the condition it desires. Viewed in connection with the known necessity for construction in many lines, it would seem unquestionable that a really important building revival is destined for a not distant future.

There are likewise present certain conditions for making this revival as important in its quality as in its quantity. In the years preceding the war the character of American architecture was, in certain respects at least, undergoing a progressive improvement. If rarely of the soil, if often oblivious to the influences animating the life of the people, and lacking in informing ideas, its technical equipment and attainments were unquestionable. An enforced pause for breath can do no harm. It has not been sufficiently protracted to induce a deterioration in acquired technique; it may have been long enough to provide opportunity and occasion for many a designer to reflect upon the inadequacy of the ideals he was in the habit of expressing. Another factor which may be counted upon as not entirely negligible is the unprecedented number of our population who have been brought into contact with European architectural conditions. Not all the members of our expeditionary forces can return with an easy assurance that it will require only the introduction of electric advertising and skyscrapers on the Grands Boulevards to make the world completely perfect and up-to-date. Many are bound to have their knowledge and their ideals affected in a way that will ultimately operate to the benefit of American architecture.

BELIEVING that through certain re-organizations of policy it can put itself in a position more adequately to serve the period of building progress which all feel is before us, THE ARCHITECT this month inaugurates changes in form and make-up which call for a word of explanation.

The diminution in size to the more compact and now almost universal page of nine by twelve inches will not fail to attract immediate attention. The curtailment, it should be noted, is almost exclusively in the margins. In the text pages a reduction of the space between col-

umns leaves the type areas entirely unaltered, while the dimensions of plates measure but a quarter of an inch in each direction under the average of former practice, and but three quarters of an inch in width and a half of an inch in height under the extreme sizes which were adopted in rare instances. Make-up and paging are such that plates may be filed, bound separately, or bound with the magazine; while text may be bound with or without the inclusion of advertising pages.

Beyond this, the new features would be less accurately described as changes than as additions. The former Architect, with letterpress and plates undiminished in extent and unaltered in quality and in aim, becomes but the leading department in a more comprehensive journal. Supplementing it is a group of new departments, edited by a competent staff, and covering the whole field of the building industry. The natures and purposes of these additional sections, as well as the resultant broadening of the journal as a whole, are sufficiently indicated by a list of the new title headings—The Home-Builder; The Garden; Interior Decoration; The Farm; The Engineer; The Contractor; The Manufacturer; The Dealer; Real Estate, Loans and Insurance; Construction News.

Naturally this enlargement of scope has necessitated a more inclusive title. Henceforward THE BUILDING REVIEW, succeeding to The Architect, will really be all that its name implies—a journal devoted to all the interests, artistic, scientific, and economic, of the building industry. The standards maintained by The Architect in the past, far from being in any wise relaxed, will be applied as well to the new obligations assumed. Special emphasis will continue to be laid, as formerly, upon the Pacific Coast field.

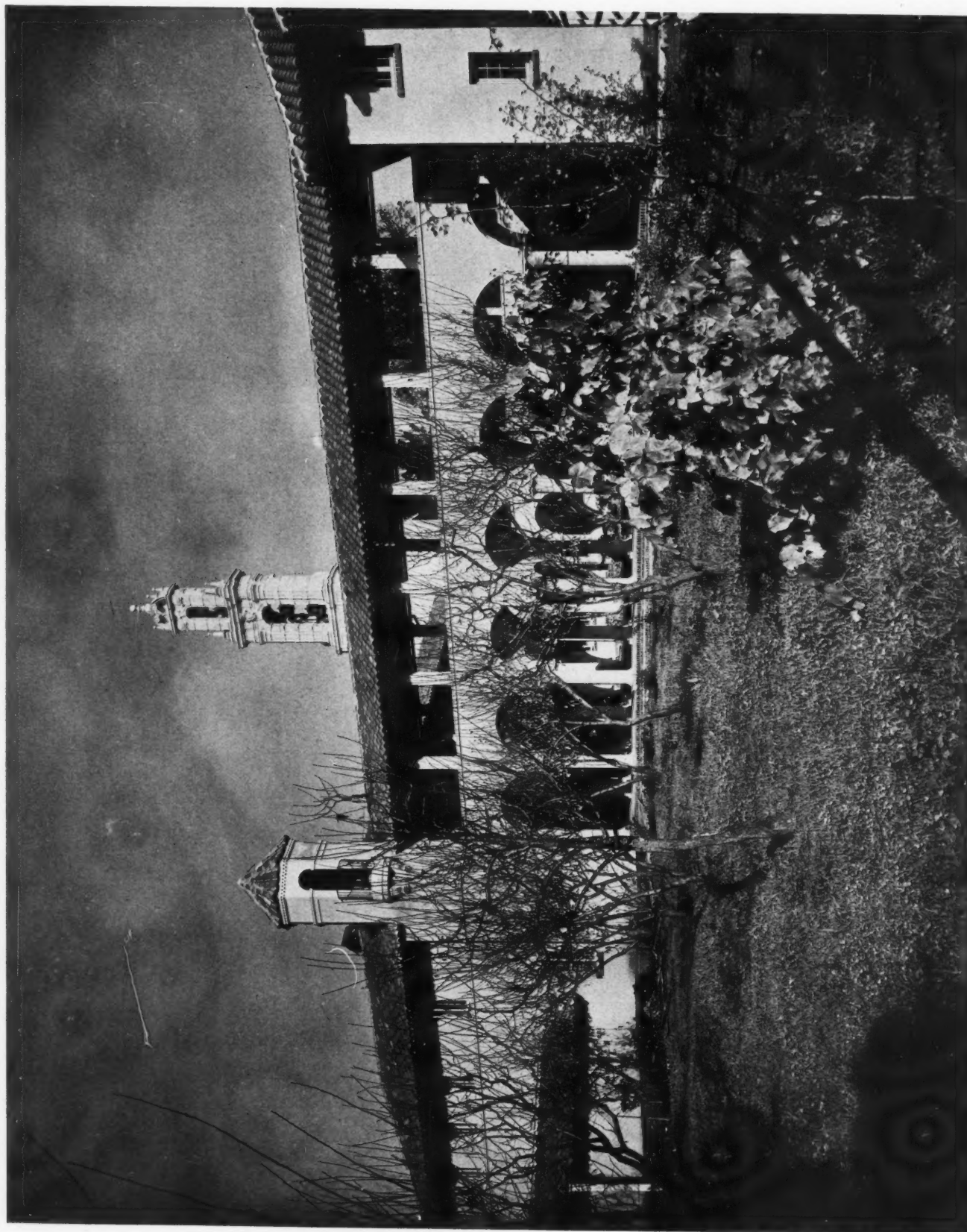
These innovations are the result of a desire to furnish a magazine of enhanced attractiveness and value. It is hoped that readers will concur that this aim has been furthered at least to some degree.

THE augmentation of contents as outlined above is not the only step which has been taken to increase the usefulness of The Building Review. It has been planned to enlarge its field of activity as well by placing it in the hands of the greatest possible number of readers. With this end in view, the yearly subscription rates have been reduced to \$2.00 domestic, \$2.50 foreign, and the magazine will be placed on all western news stands, where it will sell for twenty-five cents a copy. It will thus be brought readily within the reach of every person who is interested in building, whether as designer, constructor, investor, or prospective owner.

Unexpired remainders of subscriptions to The Architect will be extended pro rata on the subscription books of The Building Review.



✓
GENERAL VIEW
CARMELITE MONASTERY, SANTA CLARA, CALIF.
MAGINNIS & WALSH, Architects



CLOISTER LOGGIA FROM INNER ORCHARD
CARMELITE MONASTERY, SANTA CLARA, CALIF.
MAGINNIS & WALSH, Architects

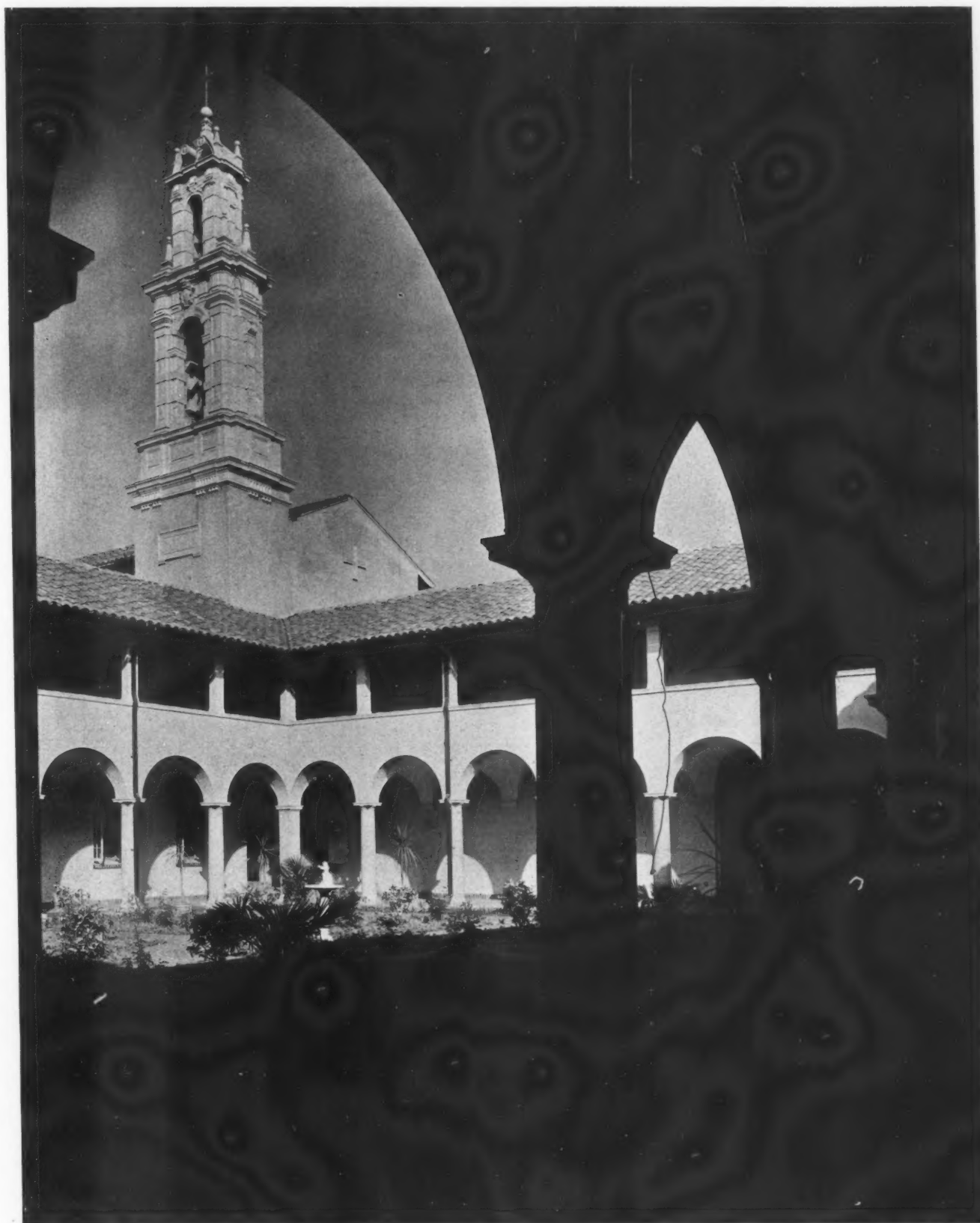
CLOISTER LOGGIA FROM INNER ORCHARD
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TOURELLE AND CLOISTER
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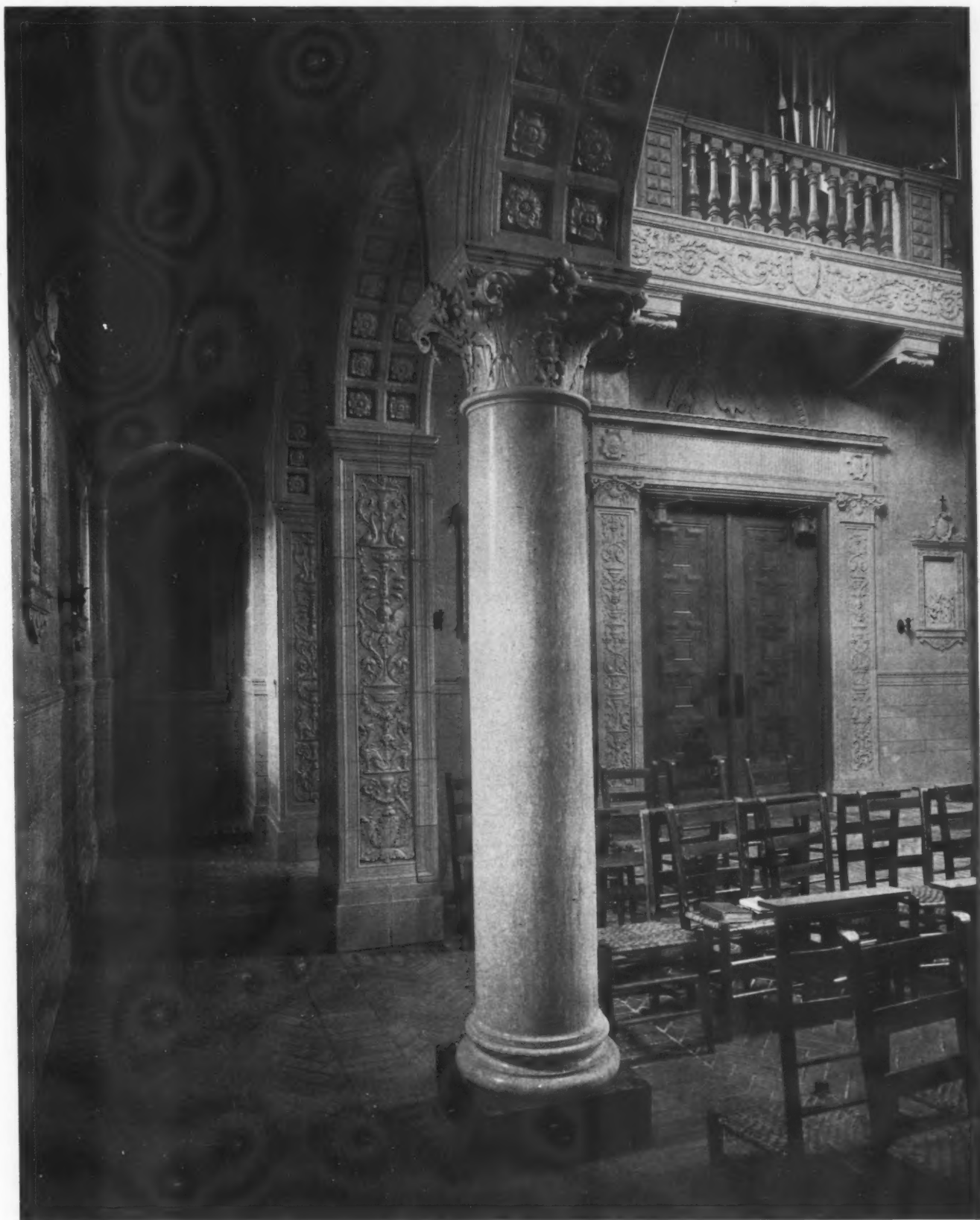
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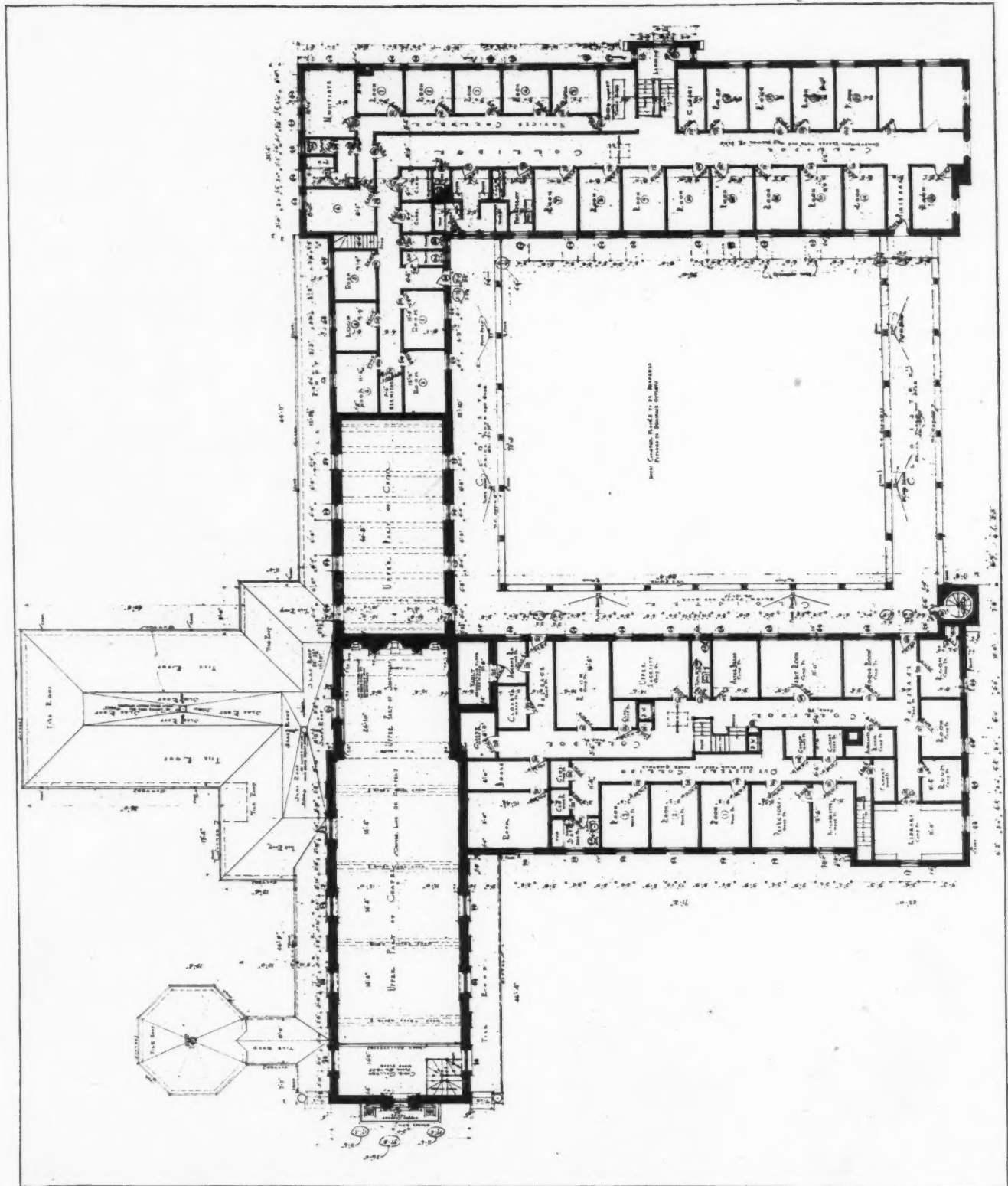
ALTER IN CHAPEL
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CHAPEL, LOOKING INTO MEMORIAL CHAPEL.
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CHAPEL ENTRANCE AND ORGAN LOFT
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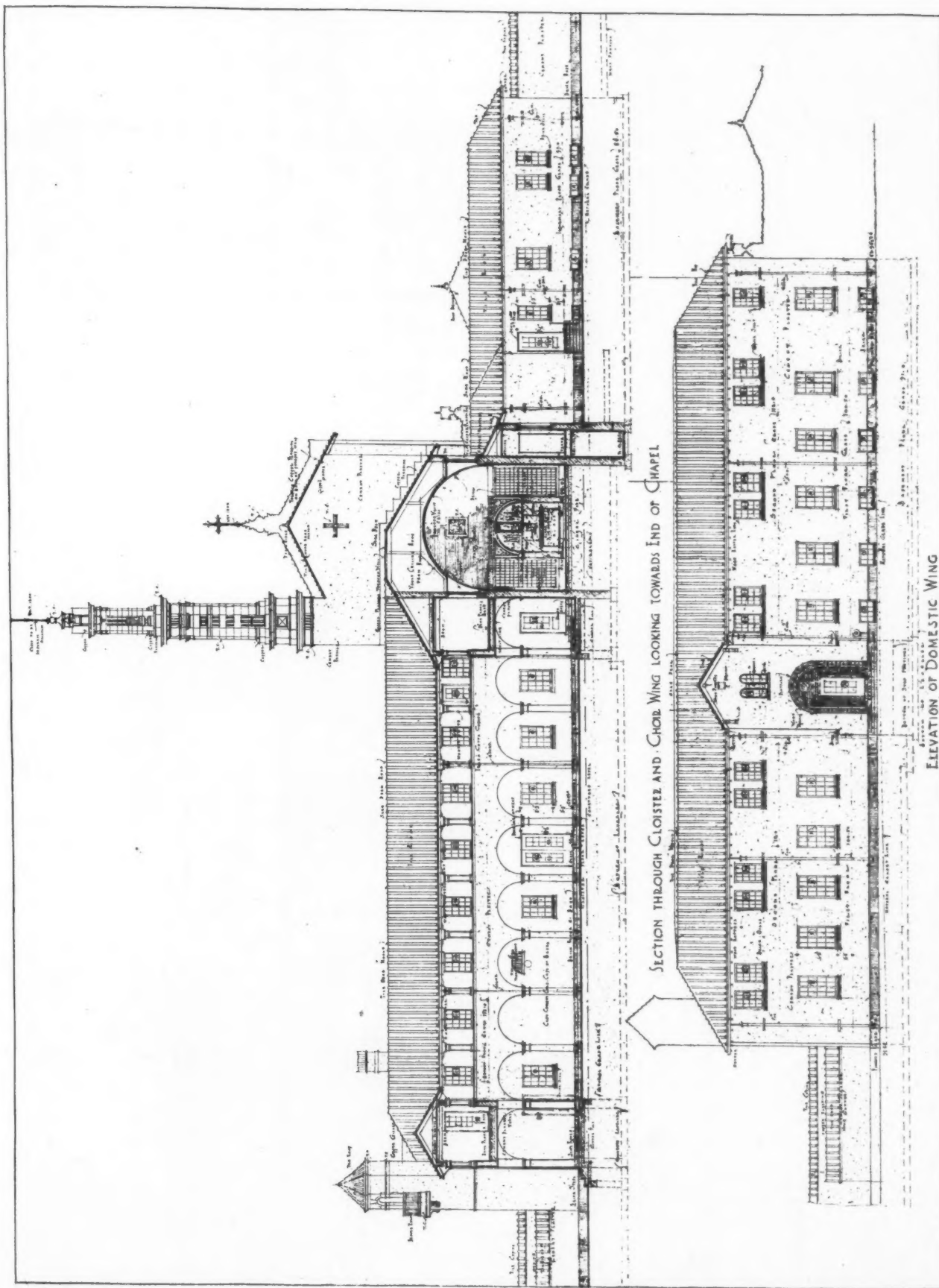


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PLAN OF SECOND FLOOR
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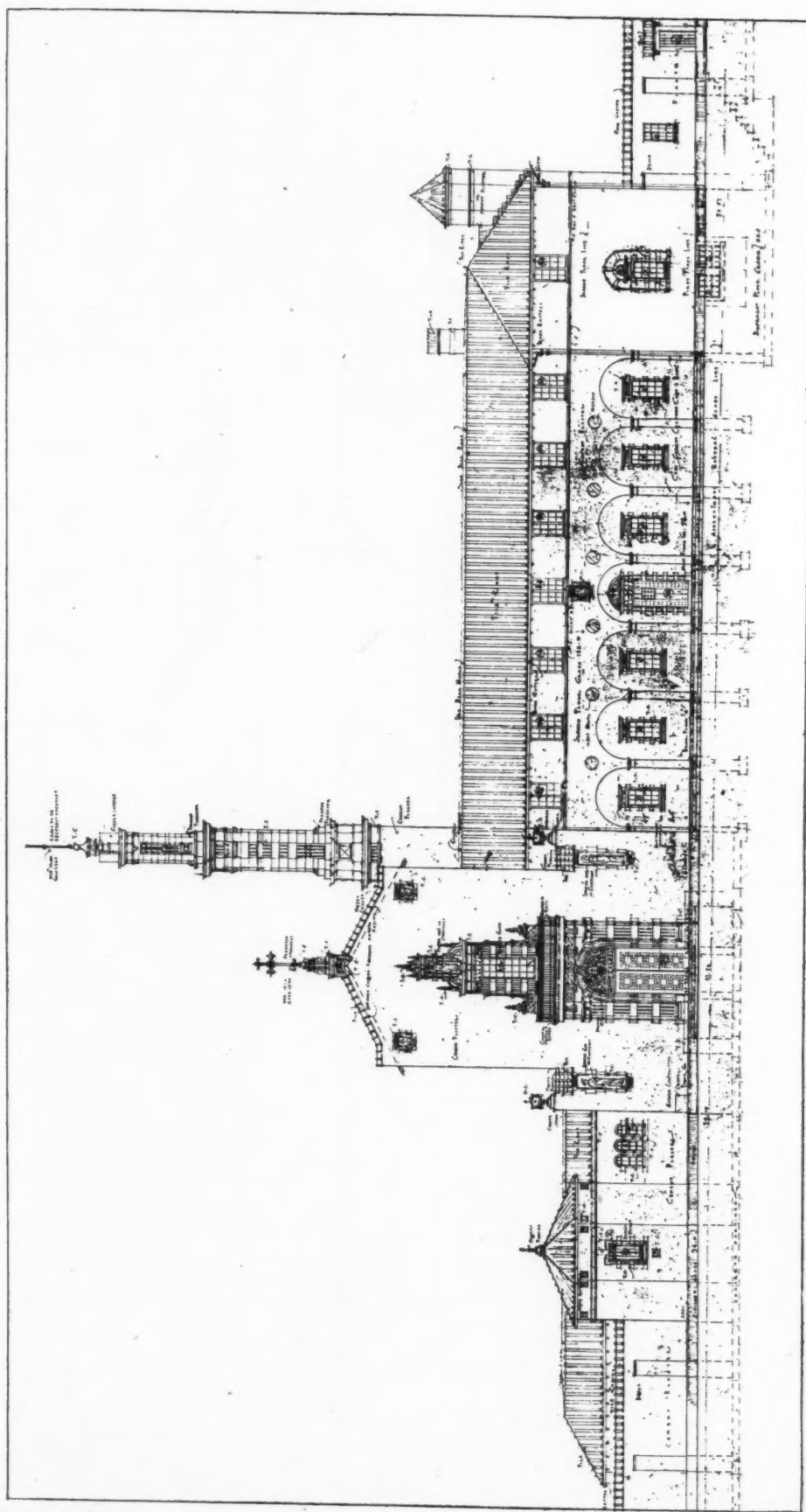
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 February-March, 1959

CARMELITE MONASTERY, SANTA CLARA, CALIF.
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 Plan of First Floor is shown on Page 90 of The Architect for February-March, 1919



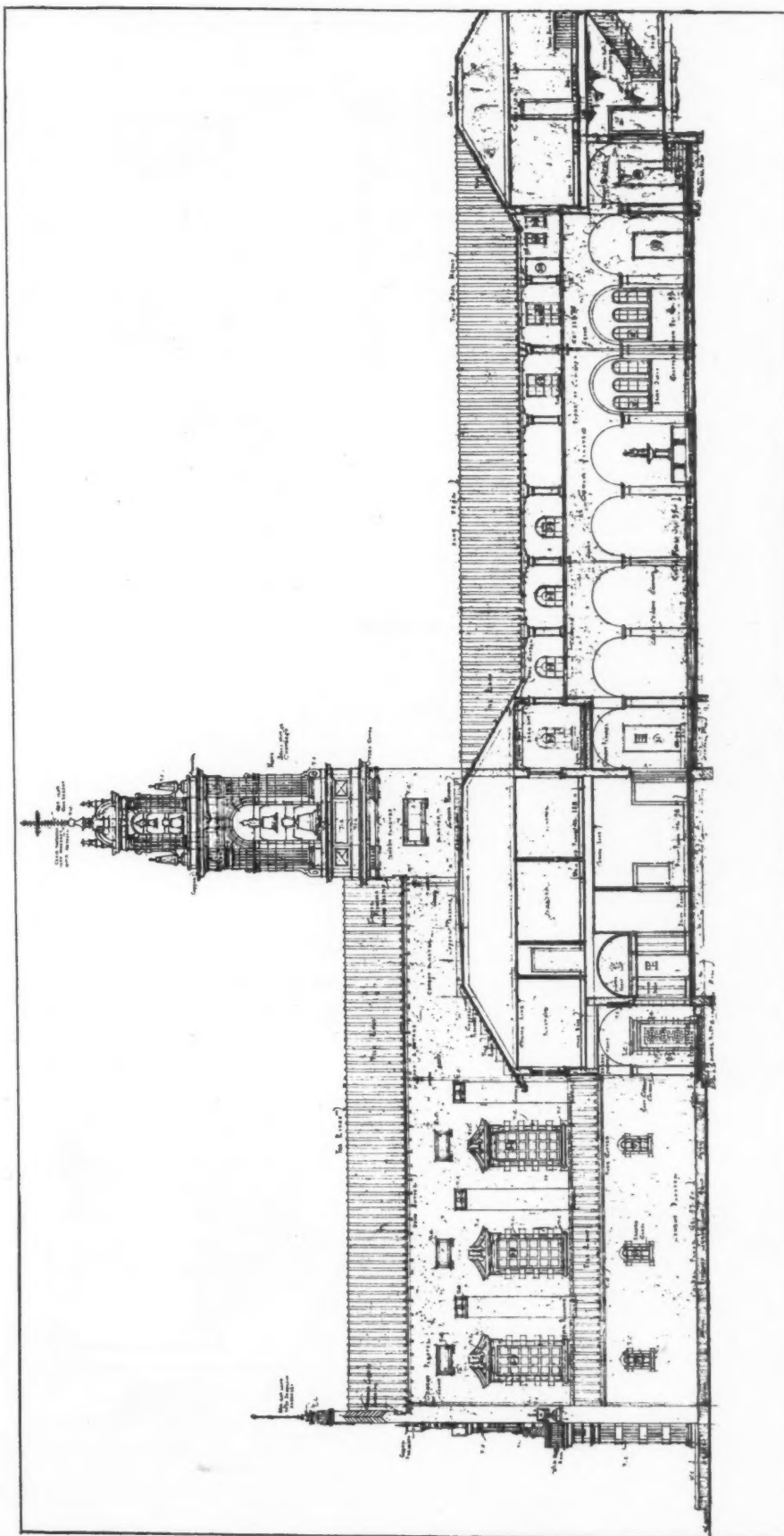
SECTION THROUGH CLOISTER AND ELEVATION OF DOMESTIC WING
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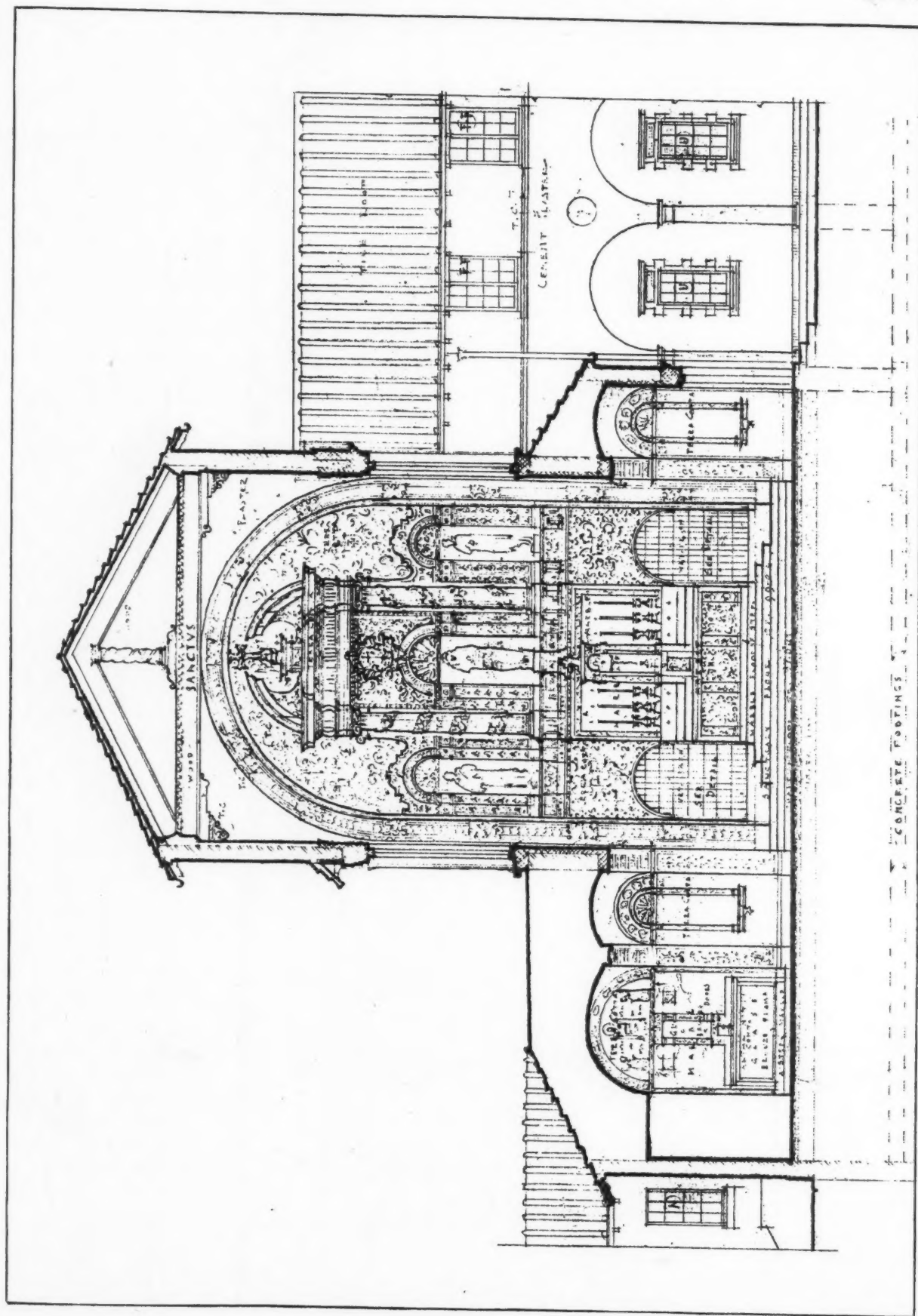
FRONT ELEVATION OF CHAPEL AND OUTQUARTERS
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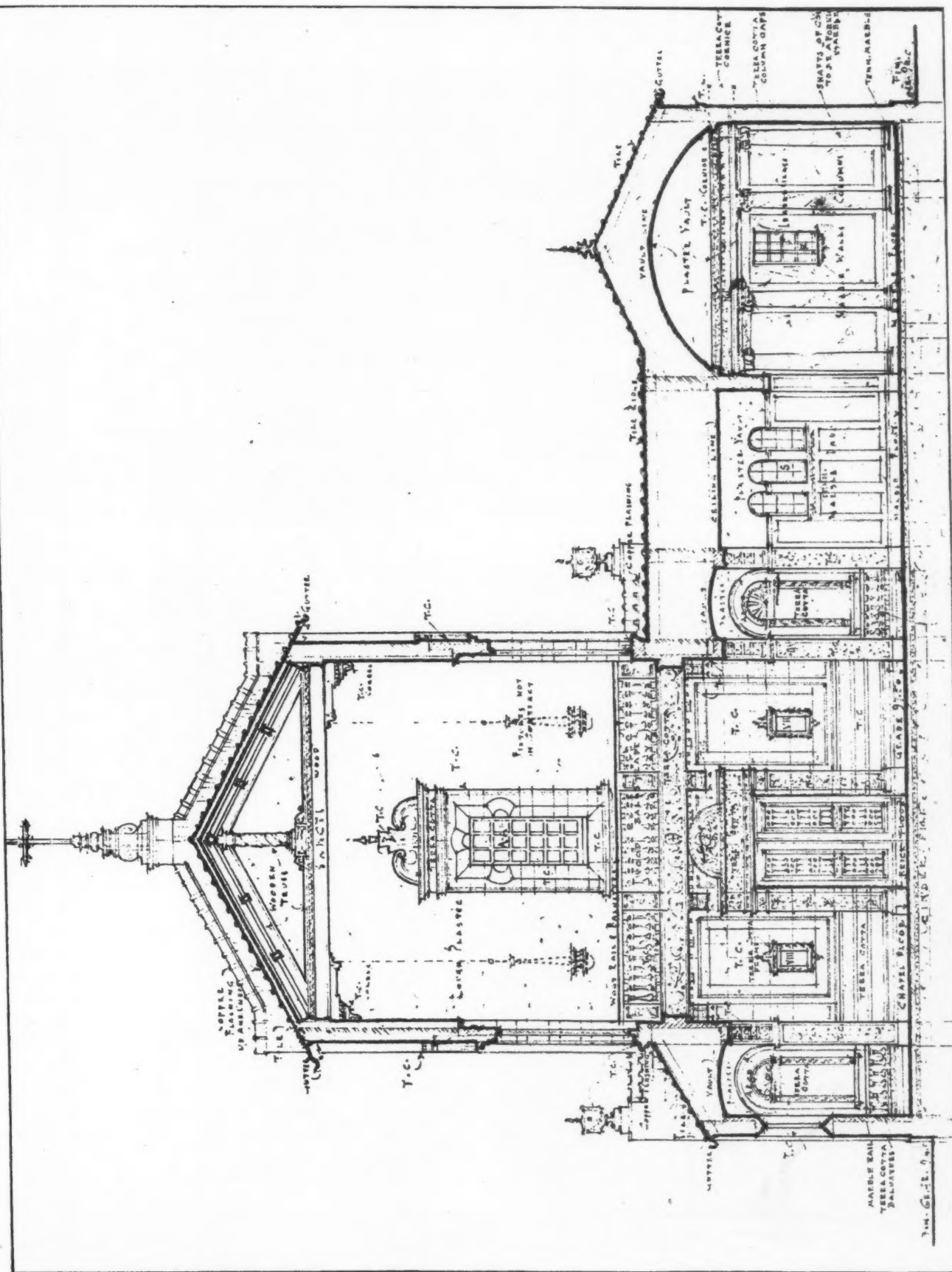
SIDE ELEVATION OF CHAPEL AND SECTION THROUGH CLOISTER
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CROSS SECTION OF CHAPEL AND LADY CHAPEL
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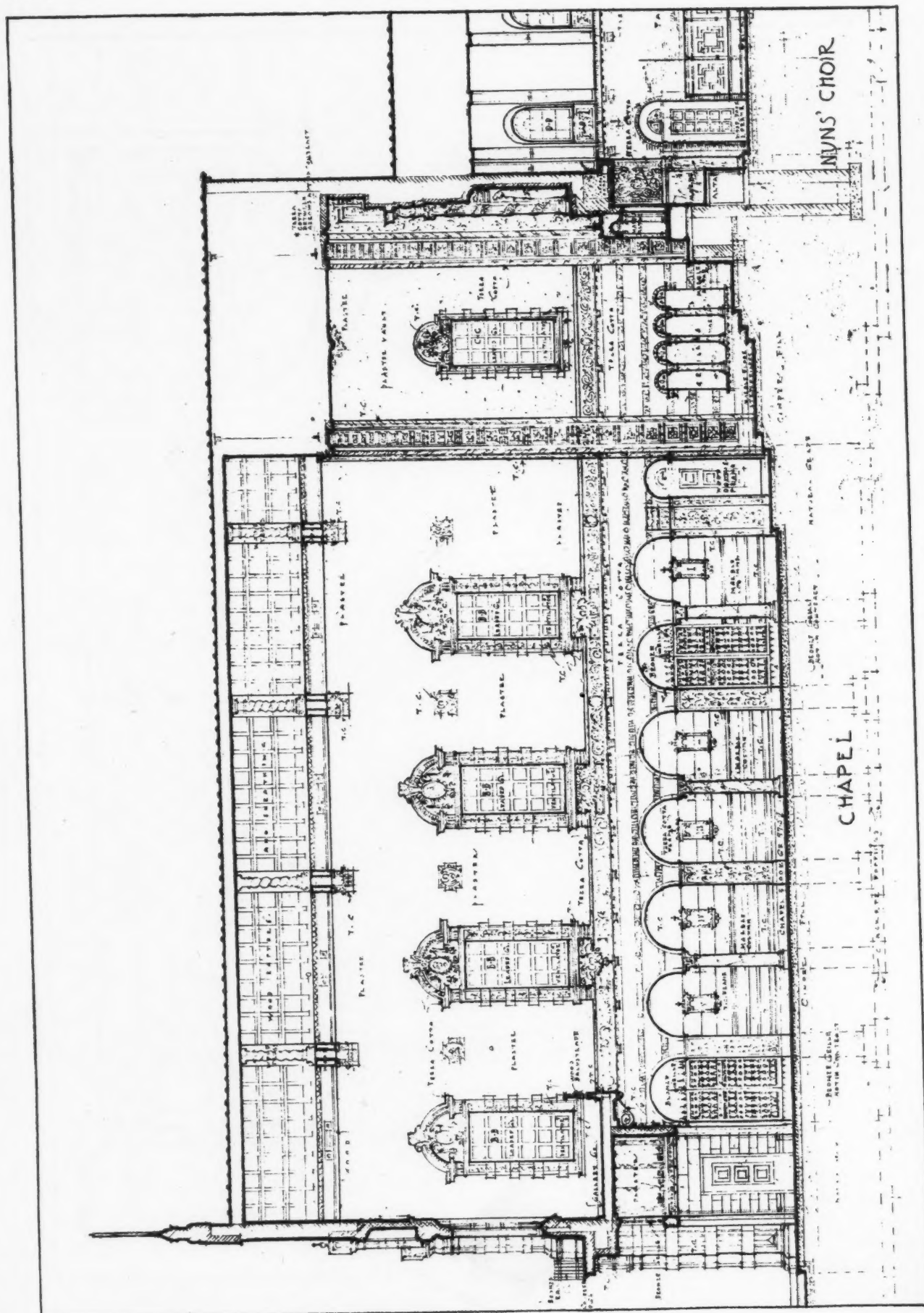
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TRANSVERSE SECTION OF CHAPEL AND MEMORIAL
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LONGITUDINAL SECTION OF CHAPEL
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The HOME BUILDER



BUNGALOW OF C. P. BROOKE, ALTADENA, CAL.

BUSINESS REHABILITATION AND RECONSTRUCTION

By BURLEIGH DAVISON

Since the signing of the armistice and the assurance that peace is once more to be the condition under which we will live—the country has given much thought to the problems of rehabilitation and rebuilding, of taking up the loose threads of industry and commerce.

The appeal sent out last year by the federal government asking the people to restrict building activities to the least possible amount consistent with the absolute needs of the country, during the period of the war, had a marked effect upon the building development of the country, so that now we find with the return of peace, a strong demand for homes, business structures and industrial plants. The question of prices of material is naturally one which the owner of property must look into well before he decides to launch any new construction. Labor conditions also affect his enterprises so vitally that this important factor in the new building revival must be taken into consideration.

The tendency in a number of building materials to drop in prices seems to forecast a return to a definite basis where the owner, architect, and builder, can confidently go ahead and put up the much needed structure without worrying about drastic cuts in prices and harmful changes.

There has been considerable advertising of late in the newspapers dealing with reduction in price of build-



HOUSE FOR MR. LOUIS HICKS, BERKELEY, CAL.
Miss Julia Morgan, Architect.



RECEPTION HALL
TYPICAL INTERIORS OF HOMES BUILT BY C. W. GOMPERTZ, OAKLAND, CALIF.



LIVING ROOM LOOKING TOWARDS RECEPTION HALL
TYPICAL INTERIORS OF HOMES BUILT BY C. W. GOMPERTZ, OAKLAND, CALIF.

ing material, giving the impression that there has been considerable reduction in all lines. While the general tendency in price of all building material is downward, in most instances the reduction has not been material. The first manufacturer to announce a substantial reduction was the American Radiator Co., cutting their boilers, radiators and other specialties 25%.

The lumbermen followed with a reduction amounting to an average of 15%.

Plumbing fixtures have been reduced about an average of 20%. This applies to finished plumbing, meaning basins, tubs, etc. Brass goods have been reduced but not exceeding 10%. Pipes and fittings, while the tendency is downward, the reductions have been so slight that at present moment it is not worth considering. They still stand at an unusually high level.

Electrical goods of all kinds, such as motors, wire, conduit, etc., remain stationery. The tendency, however, is downward, and all supply houses look for a substantial reduction, particularly as copper is piling up with no buyer. Just as soon as the manufacturers of electrical goods, motors, etc., catch up with back orders, the dealers look for a reduction in the price of motors and other electrical specialties.

Naturally, with the price of electrical equipment and metal remaining stationery, the price of elevators remains high. In talking with the Otis Elevator Co., they look for reductions in the near future.

The most encouraging sign in the present situation is the reduction in price of steel, and it is prophesied by those who are in a position to know that within the very near future the price of structural steel will come down to a point that will give a great impetus to the construction of steel frame buildings.

The other standard commodities used in building, such as brick, lime, cement, sand, etc., remain stationary, the advancement in price of these materials not having been serious or out of proportion during the war.

All in all, the outlook for building is very encouraging.

State Building Convention Meets in Fresno.

The ninth annual convention of the California State Building Council which met in Fresno during the week of March 17, was one of the most successful and enthusiastic ever held. Over three hundred delegates gathered in the Raisin City to deliberate on important matters affecting the various crafts affiliated with the state council.

W. F. Toomey, mayor of Fresno and representatives of the different civic and industrial bodies welcomed the delegates in a big reception at the Auditorium. President P. H. McCarthy of the State Building Trades Council responded to the addresses of welcome.

Among the speakers who addressed the meetings of the convention were Professor Charles Mills Gayley of the University of California, Ralph Merritt, Federal Food Commissioner of California, and William J. French of the California Industrial Accident Commission.

An elaborate program of entertainment for the visitors was enjoyed by them, including a reception, the annual grand ball, and a dinner to the delegates tendered by the Fresno Building Trades Council and a theatre party.

Own-Your-Own-Home Movement Receives Support.

The Own-Your-Own-Home movement which is being fostered by the U. S. Department of Labor with the co-operation of various business and building industries of the country, has received assurance of the united support of the real estate men of the nation. Ten thousand members of the National Association of Real Estate Boards through their secretary Tom S. Ingersoll have notified Paul C. Murphy the secretary of the Own-Your-Own-Home movement that the real estate boards have pledged their united aid to further this meritorious campaign.

The effects of the work to educate the property owner and builder to the desirability of building now, instead of waiting for prices of materials and labor to drop—which even should they decrease may not occur for months or even for years—is having its effect on the



LIVING ROOM
TYPICAL INTERIORS OF HOMES BUILT BY C. W. GOMPERTZ, OAKLAND, CALIF.



DINING ROOM

public opinion of the country and those behind the Own-Your-Own-Home movement expect a decidedly improved condition in the building and construction industries within a short time.

3,485,403 Men Placed During Year By U. S. Employment Service.

The United States Employment Service during the period from January 25, 1918 to January 25, 1919, placed in employment 3,485,403 men. This is the first years record of the bureau's work since it has been a separate placement and employment service.

For the same period of time 4,465,987 were referred to employment, but only those cases actually known to be placed, of which a record is had, are listed as placed.

Prior to the signing of the armistice 2,371,667 were placed; since the signing, 1,123,736.

The peak during this period, in which the greatest number of calls were made on the service for labor was during the first half of the month of November, when 1,715,100 calls for labor came into the various employment offices. During the same month 560,551 were placed in employment.

Calls for help, indicative of a growing labor surplus, during the following month succeeding the end of the war, fell to 1,015,000. January figures showed an aggregate of only 755,857 calls for help, and with the growing surplus of labor it is anticipated that this figure of calls for help for succeeding months will be small.

Nation Wide Demand for Resumption of Building.

Replies to questionnaires recently sent out by the department of labor to city officials of seventy-five leading cities throughout the country indicate, that there is a wide spread demand for new homes and business buildings. Fifty-seven out of the seventy-five cities so far heard from are in favor of the immediate resumption of building both in the residential and business line and blamed the high cost of materials and labor for the delay in the resumption of construction work.

"Ohio, Indiana and Illinois show a shortage in dwellings, with an occasional demand for schools and factories," the department says.

"The major percentage of the shortage in Colorado, California, Utah and Washington is for more homes. In the south and southwest there is a demand for business buildings."

The National Federation of Construction Industries in its second News Letter announces the creation of a National "Own Your Own Home" Bureau as a division of the U. S. Department of Labor. The Bureau is composed of representatives of the National Federation of Construction Industries, the National Association of Real Estate Boards and the U. S. League of Local Building and Loan Associations. The National "Own Your Own Home" Bureau will operate as a Government agency. A complete plan of campaign is now ready for distribution to those who are interested. Requests should be sent to National "Own Your Own Home" Bureau, c/o Department of Public Works and Construction Development, Department of Labor, 1607 H. St., N. W. Washington, D. C.

Persons who are interested in the work of the National Federation of Construction Industries should communicate with its General Offices at 757 Drexel Building, Philadelphia, Pa.

(Continued from Page 15)

hand weeding seems to be the only reliable remedy. Weeds should be pulled, root and all, as soon as they make their appearance and are large enough to handle. They are also more easily pulled from soft, moist soil than from a hard, dry surface.

In conclusion, it may be stated that if a person would give a lawn the same amount of intelligent care, both in construction and maintenance, that is usually given any other important element of garden design, it would not prove an expensive luxury, but a most serviceable and pleasing part of the home grounds.

The ENGINEER

HEATING OF SCHOOL BUILDINGS

By CHARLES T. PHILLIPS, C. E. *

A diversity of opinion has existed for some years with regard to the relative merits of various systems of heating and ventilating of public school buildings. When the architect is called upon to prepare specifications for these services, he is frequently drawn into controversies between manufacturers, contractors and school trustees. This condition often restricts competition, fosters monopoly, and, in many instances, contracts are awarded upon a low bid submitted with a specification, ultimately resulting in an inferior heating system.

An analysis of existing conditions, coupled with a consideration of the requirements of heating, ventilating, humidity, initial cost, durability, up-keep, safety, operating cost and cleanliness, with data tabulated so as to show that these items were given detailed study, will usually be convincing evidence that the plans and specifications have been properly prepared.

A general description will be given of the various methods used for heating and ventilating of schoolhouses.

Hot Air Furnaces.

The conventional hot air furnace is little more than a specially designed stove surrounded by a casing and usually installed in the basement of the building to be heated. The circulation of the warmed air is accomplished by gravity. This system is the most common method used in heating small buildings, as compared with other systems providing ventilation. Its advantage is its low initial cost; a disadvantage is that it is very difficult to heat any portion of a building while that particular portion is exposed directly to a strong wind. Other serious objections are that the ducts are liable to become unsanitary, owing to the collection of dust, and that cracks and leaks in the furnace permit the absorption of soot and noxious gases by the incoming air, thus impairing, rather than improving ventilation. Hand regulation is usually depended upon for temperature and humidity control, and this is unsatisfactory, automatic regulation is not apt to prove any more successful.

This system cannot be recommended for any but very small schools where economy in first cost is absolutely essential.

Forced Circulation Hot Air Furnaces

Hot air systems with forced circulation are subject to the same disadvantages as the gravity hot air system with the added initial operating and maintenance cost, except that there is a more positive circulation of the air. The fans usually furnished with this system are inefficient

and unsuited for the work to be done. The fire hazard is increased with this system, and it is more difficult to maintain a uniform temperature in the class rooms.

Hot Water Systems.

This system is usually economical in the use of fuel because the low temperature of the radiators leads to a greater transfer of heat through convection than through radiation, and this may recommend it over the direct steam systems of heating.

The high first cost, the lack of positive circulation unless pumps are used, the slowness in heating, and the liability of burst pipes and radiators due to freezing, are its objectionable features. Neither does it incorporate provisions for ventilation, which in schoolhouses, is a serious omission.

Direct Steam Systems.

The various systems of steam heating are unquestionably superior to hot air or hot water for heating purposes, but, like the hot water, they do not include any provisions for ventilating.

The most common system of piping for direct steam heating is the one-pipe system, in which the pipe carrying the steam to the radiators also returns the condensed water to the boiler. The two-pipe system, which is almost always employed in large and first-class installations, consists of one set of pipes carrying steam to the radiators and a separate set to carry the return water, and, in the vacuum systems, the air also. In ordinary buildings a system of piping more satisfactory than the one-pipe system is a combination of the one-pipe and the two-pipe systems. Here the mains are installed as a two-pipe system and the risers are on the one-pipe system. This eliminates the objectionable feature of the mains carrying the condensation from the radiators.

For buildings of medium and larger size a very satisfactory system of piping is that known as the overhead distribution system, where a vertical steam main is run to the attic and a set of distributing mains there installed, from which vertical risers are extended down through the building, with drip and return pipes in the basement. The radiator connections to the risers are single pipe. The steam and water in this system travel in the same direction.

For heating small buildings there has recently come into use a number of so-called "atmospheric" and "vapor" systems, which are manufactured by various concerns and usually patented. They operate at a low pressure or a partial vacuum, and differ from the usual vacuum

* Consulting Engineer, Pacific Building, San Francisco.

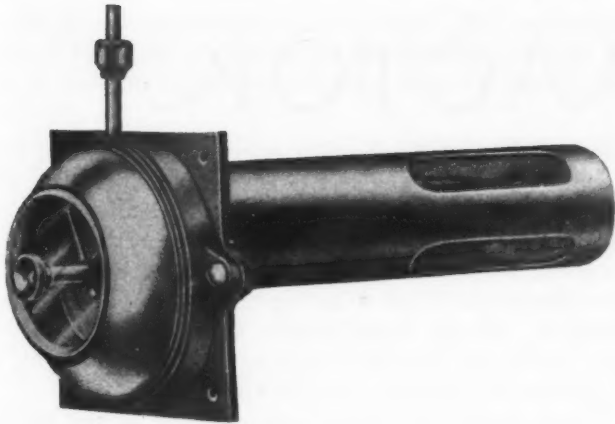


Figure 3

system used in large buildings only in the method of producing the vacuum and the amount carried. If these systems are of a flexible design, the degree of vacuum can be increased in mild weather, and during cold weather the system can be operated under pressure, thus obtaining as efficient fuel consumption as with hot water.

Direct—Indirect System.

The application of this system necessitates placing the radiators along an outside wall in order to secure the necessary fresh air supply which is its feature. This system calls for careful designing and a thorough knowledge of the principles of heating and ventilating. Its advantages are comparatively low installation cost, a separate source of heat for each room, the necessary air for ventilation and the fact that it is not so materially affected by winds as the furnace system. Hand control for both the heating and the air is usually used.

Objectionable features, however, are that when no heat is required the ventilation is inadequate and that there is no provision for satisfactorily providing the proper moisture to the air. Although there are a number of humidifying devices on the market for attachment to the radiators, they are not subject to the proper control.

Indirect Steam Heating.

In heating with indirect steam radiation cold air is drawn by a fan from the outside, passes through and around the hot radiator, and is delivered by ducts to the rooms to be heated.

The principal advantages of this system are that each room has a separate source of heat and ventilation which can be controlled independently of the other rooms; the system is not affected by the winds; no dust or obnoxious gases are carried into the rooms; and all radiation, valves, fans and other apparatus can be located in a convenient position in the basement and repairs and adjustments made without entering the school rooms.

There are many devices on the market in the way of attachments and auxiliaries for making the indirect system automatic. These auxiliaries include air washers, humidifiers and humidity control devices, cooling coils and automatic thermostats and humidostats. Where



Figure 1



Figure 2

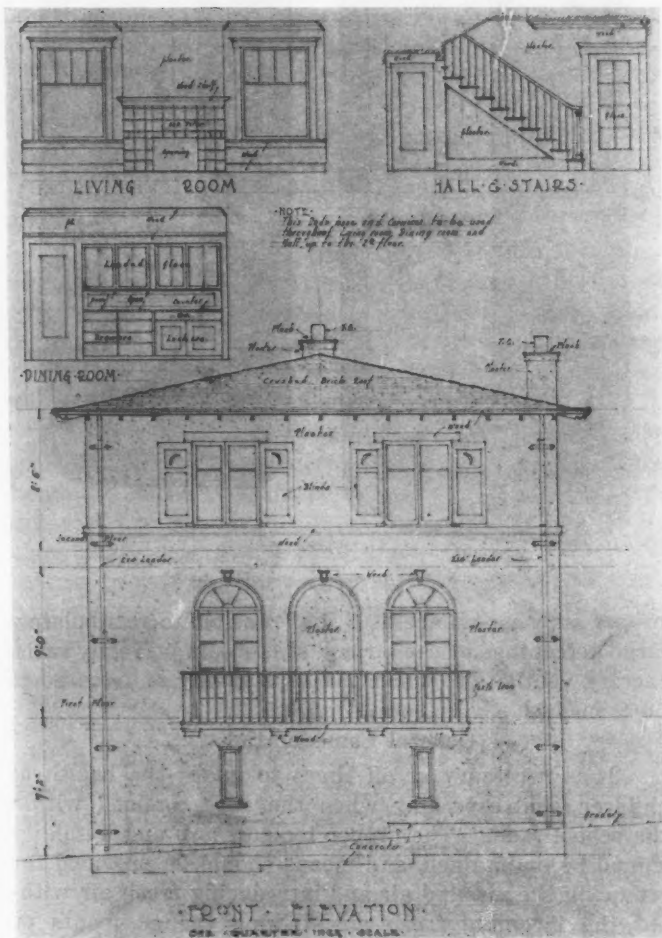
proper air washers are used it is possible to recirculate a large percentage of the air and still obtain perfectly satisfactory ventilation, which makes a saving of from 20 to 50% in fuel.

General Considerations.

It is necessary at all times to guard the health of children, and especially when they are confined within the school room. The proper temperature and humidity should be maintained, and means should be provided for removing the vitiated air and introducing fresh air without the incoming fresh air striking the occupants of the room.

Fresh air should be supplied at a minimum rate of 2000 cubic feet per hour for each 250 cubic feet of school room space, regardless of other factors. The temperature should be kept at 70°F and a relative humidity of not less than 40% should be maintained. Devices for the automatic control of temperature and humidity by a number of reliable concerns, and a thermostat for controlling the temperature of the room is shown in Figure 1. This device is only 4¾ inches in height and 2 inches in width and is to be mounted on the wall of the room in which the temperature is to be controlled. A humidostat, to control the humidity, and similar in appearance and size, is shown in Figure 2. A humidostat, for insertion in the air duct, is shown in Figure 3. From each of these devices a small air pipe is run to the damper, valve, humidifier or other apparatus to be controlled, the controlling medium being compressed air. Electricity is also used for this purpose, wires being used instead of the pipes. It is possible to regulate both temperature and humidity within two per cent. with these automatic devices. Such close regulation is impracticable with hand control.

The CONTRACTOR



FRONT ELEVATION
HOUSE NO. 1, OAKLAND, CAL., BUILT BY MR. C. W. GOMPERTZ
EARLE B. BERTZ, Architect.

SHALL WE BUILD?

By CHAS. W. GOMPERTZ

Every Investor, Speculator, Real Estate man and Owner is asking himself, and everybody he thinks is interested, this question; "Shall we build?" From the viewpoint of a speculative builder, there has never been as good a market in San Francisco, and Bay Cities, as exists today.

Many houses, built years ago, that have clogged the market, have been disposed of, buyers have not been so particular as the majority were forced to buy in order to secure what they could not rent.

Desirable apartments, both in San Francisco and Bay Cities, are bringing in unheard of returns and the writer visited twenty of these in one day, without finding a vacancy, and in most cases, the owners had a waiting list of from ten to twenty people.

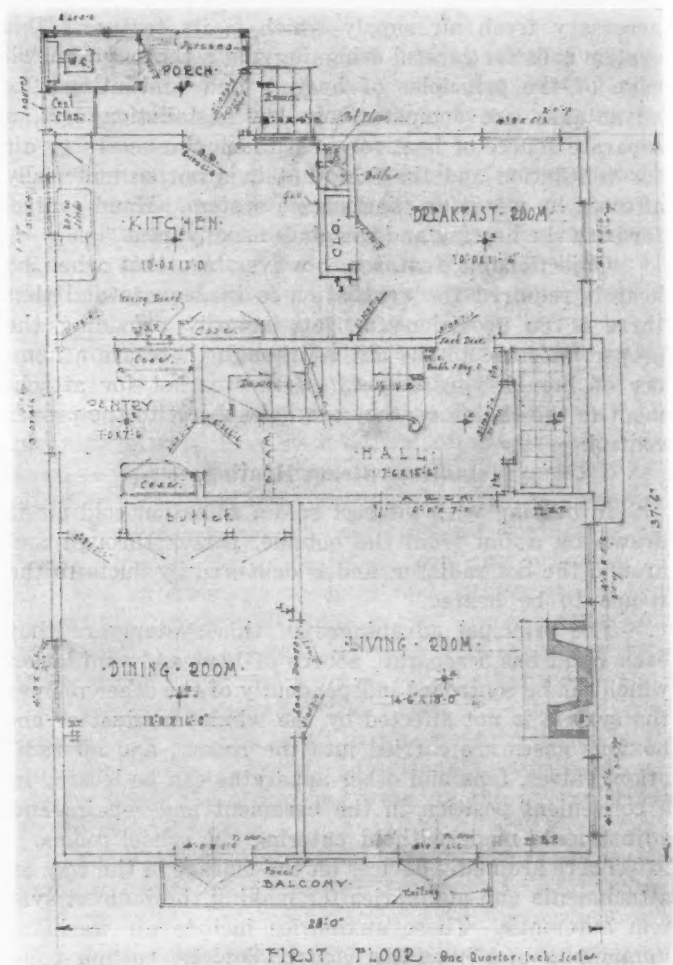
One builder in San Francisco has sold ten houses since the first of January, that are under construction,

and has orders for seventeen more that he has not even started. The City of San Francisco is, at this time, contemplating spending millions for new schools that are an absolute necessity. The State will shortly erect the proposed Armory in the Civic Center and every farmer throughout the State is taking advantage of the opportunity of buying cheap lumber and material that was taken from the wrecked buildings at Camp Fremont, U. C. grounds at Berkeley and elsewhere.

Real Estate has never been so cheap in and around the Bay Cities, and though it costs more to build at this time than before the war, yet, with the present price of real estate and the good market, it seems the logical time to build.

Many Owners, Architects and Builders are waiting for prices to drop, but it seems to the writer, that you can safely build at this time without a fear of having to depreciate your property for years to come.

Let us analyze the situation. Steel has dropped about \$20.00 per ton, lumber has dropped about \$6.00



FIRST FLOOR

THE BUILDING REVIEW

per M, plumbing supplies have dropped 25%, brick has dropped \$2.00 per M, and many other materials that go into a building have dropped since the signing of the armistice.

Now, another question that the Investor asks is will they drop further, or will they advance.

I had occasion to attend three Conferences of the National Federation of Building Industries in Washington, D. C. and New York, during the war, and was in close touch with the War Industries Board and also attended the Reconstruction Congress of the National Chamber of Commerce of the United States, held at Atlantic City, after the signing of the armistice, and the impression I received from coming in contact with representative men, engaged in building and handling building materials, was that, when the war ended, all stocks were depleted, our closets were empty, our shelves were bare, not locally or nationally, but universally, and if this were true, what would be the logical result?

We are at least two years behind in our normal building throughout the United States, and at the present time, there is no building, yet there is bound to be a building boom as soon as you can educate the Investor that he will not have to write off twenty to thirty per



SIDE ELEVATION

cent on his investment in the next two years, and when there is a demand for building materials, and in stocks, there will be an advance in prices.

The question of labor is, at this time, hard to analyze. Some of the Unions have forced an advance in wages, since the signing of the armistice. The tanners were granted an increase from \$7.00 to \$8.00, the plasterers and brick layers from \$8.00 to \$9.00, the painters from \$6.00 to \$7.00, but there is considerable amount of labor obtainable at this time, and necessity may force a reduction of wages.

After all, if labor will give the proper amount of efficiency the present scale of wages does not seem out of proportion to living costs.

Living costs and wages seem to travel hand in hand. When carpenter's wages were \$3.50 per day, it took a day's pay to buy a good pair of shoes and when the wages advanced to \$5.00, it took a day's pay to buy a good pair of shoes, and so to-day, when wages are \$7.00 per day, you have the same result, a good pair of shoes costs a day's pay.

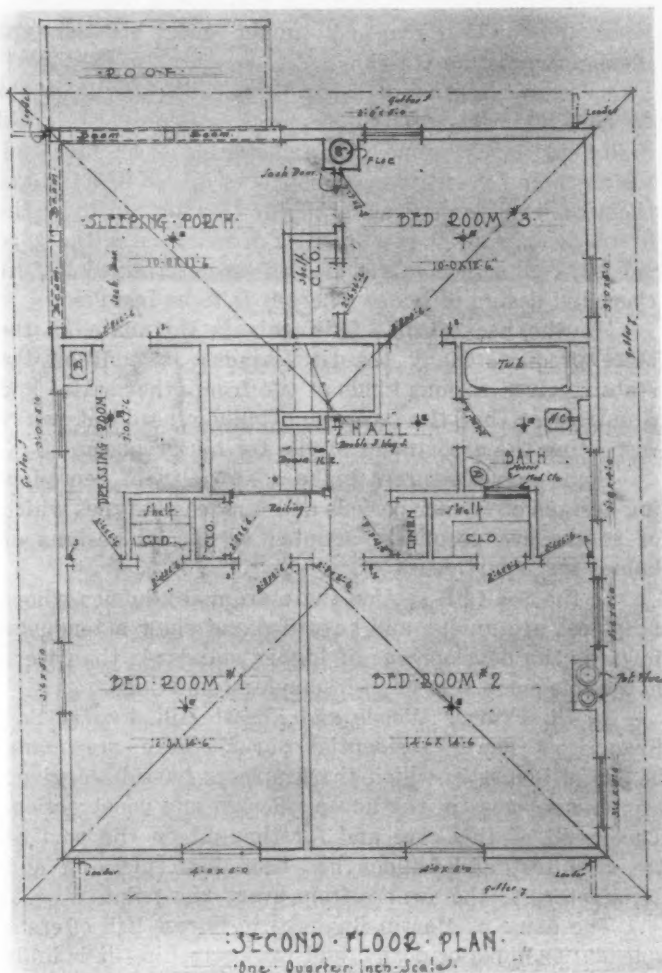
The fact that there is a Victory Loan pending, which will have to be taken care of, may deter timid investors from building at this time, but the banks seem to be disposed to make building loans and there is also a lot of private money that can be obtained for building at bank rates.

In the last analysis, the facts are as follows: there are no apartments vacant and no houses to rent.

Rents are being continually raised and there is a good market for any building for living purposes.

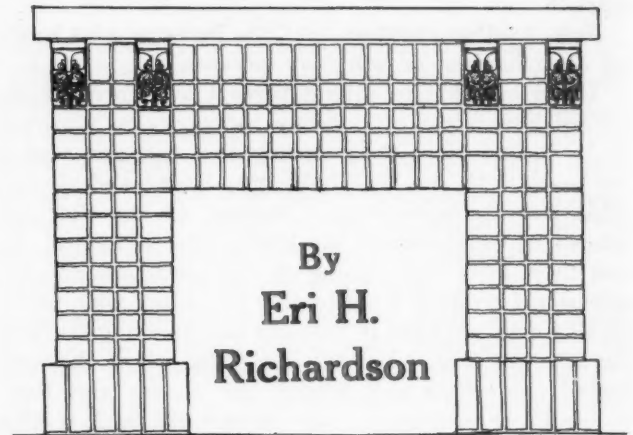
Also the Eastern Manufacturers are turning to the Pacific Coast and are looking for locations to establish branch houses as the freight rates are such that a manufacturer that can secure his raw material on this Coast can afford to put in a branch to take care of his Coast and Oriental trade.

Therefore, the man who has the courage of his convictions and will give this matter mature thought, can arrive at but one conclusion. "Build and Build now," while there is market.



SECOND FLOOR

INTERIOR DECORATION



The question of providing the new home with the most suitable and appropriate fire place is one which presents many problems to both architect and builder and one which requires a whole lot of study to secure the best results in beauty, utility and comfort. In districts where trees and overhanging foliage steep hills and varying undulations of the topography are the dominant features of the landscape, great care should be taken in planning the fireplace and its surrounding walls so as to get the best protection from the wind eddies and down draughts which characterize regions of this kind.

In the first place, after the type and character of material has been selected out of which the fireplace is to be built, care should be taken to see that the flue be properly proportioned to the opening of the fireplace and the fire back and throat built to take care of the noxious gases, to stop the down currents of air and at the same time provide and throw out into the room the maximum of heat which the fireplace is capable of providing. Too often, owing to faulty construction or poor planning, fireplaces fail to give out sufficient heat to justify their use or to pay for the fuel burned in keeping them going.

There has been a tendency in the past, in planning rooms where the fireplace is the chief feature of one side of the room, to not give the matter of this important feature of the house the proper amount of thought,—fortunately of late the importance of the fireplace both in respect to its utility and beauty, is being recognized by the various crafts which build homes and the result is a much finer and more useful type of fireplaces in the newer homes.

The question of type and design of the fire place must be left to the judgment of the architects or, of course to the owners, if they have special ideas which they wish to incorporate in the construction. The incongruity of setting jarring and inappropriate designs and types of fireplaces in houses is something to be avoided at all costs. Nothing looks so inharmonious as a mixture of various

styles of decorations and interior details of finish which clash. This can be easily avoided by the proper study of the house, the grounds and the setting and no owner or builder should allow a poor piece of work as the above mentioned to "get by," as they say in the street.

The fireplace is the heart and center of the dwellers home and for that reason it should reflect his taste and ideals as much as possible.

The possibilities of securing splendid effects in the various materials used in fireplace building are almost unlimited; brick, stone, tile and marble each offers advantages and presents certain phases in use which make them desirable as the material out of which to build the fireplace in many cases, in fact, in most cases the type and style of the fireplace, should be determined by the class and design of house where it is to be installed.

In the use of tile—California is fortunate as the state produces many beautiful kinds. In addition the state receives various kinds of tile from other states and countries so that the owner and builder need not worry respecting the assortment of tile for his fireplace.

Some manufacturers make a specialty of reproducing designs of former periods and famous old types which of course are peculiarly adapted to special designs of homes and apartments.

In the Sea Cliff section there are many homes whose fireplaces are unique and beautiful and show a tendency towards the development of higher standards than were noticeable some years ago in our local buildings.

In St. Francis Woods and Forest Hill, two of San Francisco's newer residential parks, there are many beautiful homes in which the fireplaces have been given prominent places in the house's design and construction. The result of this care and forethought on the part of the architect and builder has been both pleasing and satisfactory to the owners from every viewpoint.

The home of Martin Raggett, in Forest Hill offers a splendid example of design and workmanship—it is built of Clark tapestry brick of a soft tan color and hand made



LIVING ROOM, MARTIN RAGGETT RESIDENCE, FOREST HILL
Falch & Knoll, Architects. Higginson Co., Contractors. Fireplace by Eri H. Richardson

tiles in dull blue. The effect is very artistic and beautiful.

The Lent mantle in the same tract, is of Batchelder tiles, such as were used in the Redwood Bungalows in the Exposition in charming tones of browns and reds.

The Spring Call for New Wall Paper.

The American householder finds that with the advent of spring the problem of renewing the freshness and beauty of his walls and interior furnishings becomes one of the paramount problems of the moment. The advance in the prices of wall papers, the advance in the cost of all kinds of labor, pertaining to the home building and repairing and the fact, that this season there is a much smaller assortment of designs in wall papers and hangings to choose from, as the manufacturers have put out only twenty-five designs as against seventy-five of former years, will make the average householder loth to start the repapering of his rooms and the general spring cleaning.

Whether one wishes to merely clean the walls of the house, or replace the old wall paper with a new covering of some more up-to-date design, the task of freshening up the home is one which no careful housewife will neglect.

In case the walls are to be cleaned and a home made cleanser used, the application of the following will be found very efficacious. Two teaspoons full of washing soda, mixed with a quart of flour the whole of which mixed with water and made into a dough, makes a good cleanser. Many excellent preparations are advertised for this kind of work.

It is not unlikely the woman who has been in the habit of buying a cheap paper other years will be looking about for a still cheaper paper this year. Ordinarily, inexpensive papers have been perfectly desirable, especially where the walls were repapered each year, since their designs were as dainty and attractive as could be found in the more expensive ones; but, owing to the scarcity of good dyes this year, and the limited number of designs created, it stands to reason that the best choice in everything has gone into the better grades of wall coverings.

Simplicity in design and a limited number of designs combined with a greatly curtailed output, mark the present day situation in wall paper and wall finishings, so the careful and economical owner may plan this end of the house renewing accordingly.

The FARM

AGRICULTURAL PROGRESS AND FARM STRUCTURES

By WILLIAM C. TESCHE

HOW closely does your definition of "Agriculture" agree with that of Noah Webster? He defines it as "the science and art of cultivating fields by the plow," and adds that an agriculturist is "one engaged in tillage." Unless you accept it as a science and an art and practice it as such, consider yourself a likely candidate for the proverbial back seat;

for Webster was right in so far as the preliminaries are concerned, even though the farmer of that day might have entertained and even given vent to explosive skepticisms as he gazed at his hands, the calloused results of combined scientific and artistic effort! In as much as Agriculture demands the skillful adaption and application of certain rules of Nature it is an Art. Rightly conceived, it becomes a Science of Sciences, a harmonious union of all Natural Law.

Granting the above, does not your conception of the term, as broadened by modern usage, include a more comprehensive scope of activity than merely "cultivating fields by the plow?" It should, for today the successful farmer not only tills the soil with the plow, but in addition concerns himself not a little bit with the economic aspect of the plow business, the care of his implements, the preparation, storage, and transportation of the products of tillage, their sale, together with a study of market conditions and an analysis of his profits or losses,

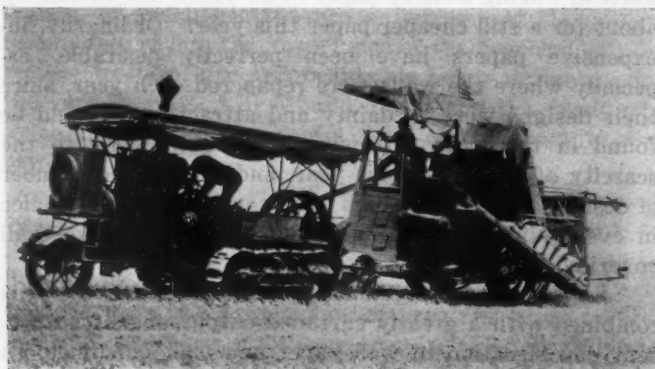
and lastly but not the least important is the attention he gives to his permanent farm improvements such as buildings and fences. We may therefore augment Webster's definition by adding that Agriculture is also the business of efficiency maintaining the farm establishment with all accessories to tillage, and involving the profitable disposal of resulting produce.

You will appreciate the fact that Webster lived before the day of the tractor, combined harvester, co-operative associations, farm cost-accounting, ready-made fertilizers and blood-thirsty middlemen.

Narrowing the discussion down to a specific phase of the subject, namely that of farm structures, are you weighing the proper proportions of Efficiency, Economy and Beauty in the formulation of the farmstead? The business man in the city first selects his shop in the most advantageous locality and then arranges its fittings to meet the requirements for handling his stock in trade. This is Efficiency. He avoids extravagant and useless expenditures, thus increasing profits in proportion to the investment, and cutting out heavy depreciation. This is Economy. He maintains neatness of display, cleanliness, and decoration pleasing to the eyes of his customers and a great source of satisfaction to himself. This is Beauty. Obviously, the modern farm demands the same consideration, and the application of these same principles in the



GROUP OF BUILDINGS ON KEARNEY RANCH—FRESNO, CALIFORNIA



MODERN FARMING OF THIS TYPE MEANS



DOOM TO SCHOOLS OF THIS TYPE

order named when planning any farm construction not only stamps the operator with the mark of enterprise, but is, in addition, an absolute necessity under competition. It is a case of "sink or swim" in many instances, and many have gone down for the third and last time as the result of poor judgment in equipping the farm.

Structures are erected as a means of protection and to facilitate certain routine operations. A California barn is never called upon to withstand the rigors of an Eastern winter, but should offer snug refuge from wind and rain. If the wind whistles its dismal tune through cracks in the walls, if the raindrops find inviting holes in the roof, if the rats thrive under the floors and your stock occupies damp stalls, your idea of protection is either sadly cracked or your middle name is carelessness. Efficiency in conducting the routine work is a negative quantity if you have to handle manure a half dozen times before it is properly disposed of, or if the hay loft and grain bins are

inconveniently placed. A horse barn must combine different qualities than a granary. A portable shed must not only be a shelter, but must be really portable yet strong enough to stand pulling around. In a nutshell, while planning the building, considerable thought on the purposes for which it is to be erected and climatic conditions to be overcome, linked with a labor-saving arrangement of interior parts, will have its substantial reward.

Buildings depreciate and consequently upkeep demands its annual toll from each acre. See to it, then, that every board has its correct place and the strength to exactly meet the strains, and then cut out the extra ones which might be nailed on for decoration or super-safety.

Neatness and beauty about the farm not only repay the operator by a continued sense of pride and satisfaction in the midst of his toiling, but reflect to the rest of the world his inner self, and this combination of the man and his works after all constitutes enlightened agriculture.



PROPER EXPOSURE AND DRAINAGE ARE IMPORTANT FACTORS.
Clover Ranch, American Hog Company—Mayfield, California

SELECTION OF LUMBER FOR FARM USE

Wood has been the farmer's standby for many years, and in all probability will continue its reign of popularity until that time, should it ever come, when scarcity will prohibit its use. Common as is the use of lumber on the farm, frequent mistakes are made by purchasers who fail to give sufficient thought to the purpose the lumber is to be put to. There is no use in buying and paying the price for No. 1 grade when a cheaper grade will suffice.

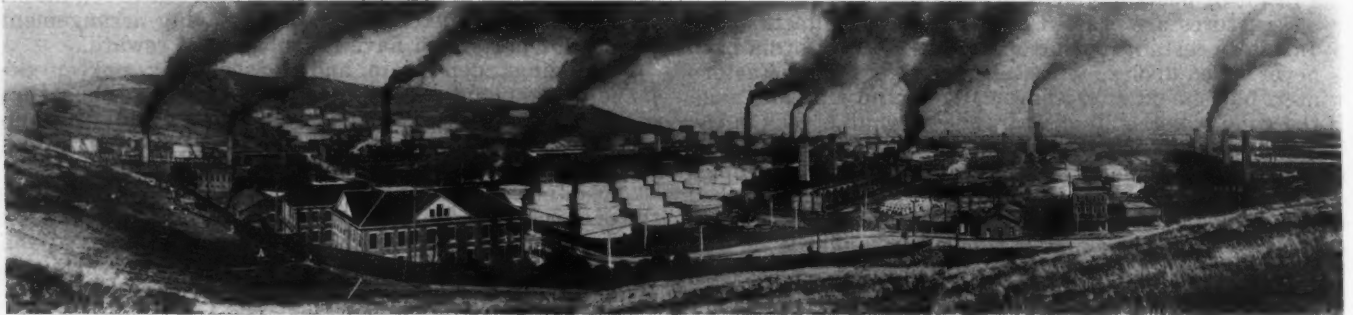
For major construction work, Redwood and Douglas Fir, or Oregon Pine as it is more commonly called, are favorites on the Pacific Coast, because of their availability and suitability. Each has its own merits and a knowledge of the adaptations of each will prove valuable to the buyer. Oregon Pine is relatively a hard dry wood and is unexcelled where strength is the main factor. On the other hand, where the climate is hot and dry it will warp and check, and if in contact with damp ground it readily becomes the prey of fungi and other agencies of decay. For heavy construction such as bridge work and supporting framework the pine should be the choice. Where exposed to the elements it should be well painted, and those parts to be buried in the ground thoroughly creosoted.

The wide use of Redwood on the farm is the result of its great natural resistance to fire and rot. For tanks, well casings, flumes and gates in ditches there is nothing to surpass it in the way of available woods. It is light and fairly strong, and therefore adapted to the major part of farm construction, and in addition is difficult to ignite and slow to burn, which in itself is no small consideration on the ranch where fire-fighting facilities are meager. Shrinkage is very small, therefore rendering it particularly useful where tight joints are required.

Obviously, lumber with no defects and the smoothest grain is considered the best, and therefore commands a higher price. The farmer often makes the mistake of buying nothing but the best for all purposes, thereby involving a certain amount of useless expenditure, for while permanent construction designed to meet shocks requires lumber without flaws and weak spots, much of the building on the farm is temporary or rough in nature and second grade lumber will suffice. A few knots and resin pits will not cause much trouble in a temporary drying shed or hay cover. Certain sizes are more expensive than others, and when the cheaper size will suffice, there is no reason for buying the more expensive. In this regard the farmer is advised to study prices more carefully. In addition to the quality factor, buy the cheaper cuts where possible. Lumber companies are always anxious to sell wood from the "boneyards," or piles of odds-and-ends and slightly damaged pieces, at very low prices—another chance for the economical farmer to supply himself with lumber suitable for troughs, temporary fences and a thousand and one odd knick-knacks necessary on the farm.

Further instructive information on this subject may be had from Bulletin 299 of the Agricultural Experiment Station, Berkeley, California, and in addition to the results of studies on lumber, plans for farm structures adapted to western conditions have been prepared by the Division of Agricultural Engineering, University Farm, Davis, California, and can be borrowed without charge by any California farmer who will write for them. Address requests to the Division of Agricultural Extension, University of California.

The MANUFACTURER



RICHMOND REFINERY OF THE STANDARD OIL COMPANY OF CALIFORNIA

THE MANUFACTURER AND RECONSTRUCTION

By WILLIAM RUTLEDGE McGARRY

THERE is not a manufacturer on the Pacific Coast who is not more or less familiar with the causes that put him out of the running during the period of the war. In all parts of the United States the conditions in this respect repeated themselves. War with its capacity to destroy made many manufacturers "non-essentials." Destruction and non-construction became the order of the day; and the American people entered upon a holiday of spending to promote the saturnalia of quick decay.

Almost over night the hungry mouth of war began consuming all the material, absorbing all the transportation and ousting all the normal activities of life from their accustomed fields of production.

The building industry was the first and greatest that came into collision with the mailed hand of war. Throughout the whole country building of every kind ceased. Contracts were cancelled or held up. And the BILLIONS that had hitherto been devoted to peaceful enterprises were hurled into the vortex of military fury where it became a patriotic duty to destroy.

Only for the direct purposes of the war did building presume to reveal the historic connection between the manufacturer and the record of his achievements in society.

First he came under the jealous eye of the Secretary of the Treasury and his activities were curbed at

once. Then he fell a victim to the Capital Issues Committee and his financial strings were cut. Finally he was placed on the altar of the War Industries Board and became a vicarious atonement for the sins of Europe and a sort of eucharist for a sick and bleeding world.

There is always a lull before the storm breaks loose. There is always a time to take advantage of the APPROACH. That is in the lull, when things seem disappointing, but which, in reality, are only indicative of a coming rivalry that makes a tragedy of many fine spun schemes. The philosophy of it all is DO NOT WAIT,—get going, get your forces of production organized at once. Don't wait till the government, the state, the city, the farm and all your neighbors get into the labor market and make your hesitation look like the agitation of a fevered dream amid inviting fields and invigorating winds.

Men build in the present for the future. They always discount the loss for the probable profit that the enterprise insures. In times succeeding wars labor is often high and gold is often cheap. And this thing is going to be the case in every part of the world until our international balances and our systems of exchange have readjusted themselves. It will take a few years at the shortest. In England it may take five or seven years; meanwhile English labor will be TWICE what it ever was before. And so far as industrial England is concerned it



WILSON BROS. & CO., SAW MILL AND DOCK—ABERDEEN, WASHINGTON

THE BUILDING REVIEW



PLANT WHERE SANTA CRUZ PORTLAND CEMENT IS MADE

never will be able to COMPETE with the United States in capacity to produce unless it revamps its entire industrial system. And England WILL NOT revamp. In Canada labor conditions may be less exacting than on this side of the line; BUT there are enough new building enterprises ahead over there to develop an accute demand for labor in a very short time so that no help can be expected from that quarter, even if the principle of trades unionism were not to be recognized at once and forever as a permanent and established thing. The war has settled that. Society MUST recognize it; and, in recognizing it the manufacturer is to that extent relieved of any internal misgivings in contracting for his output.

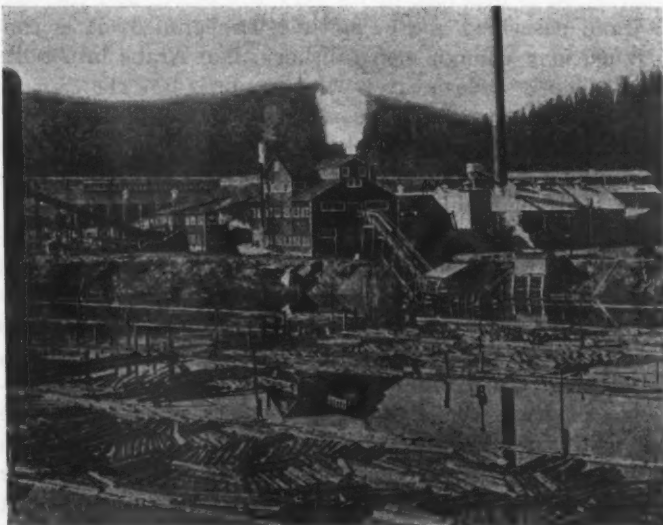
Herein lies the manufacturers opportunity to do a noble and a patriotic work. Here he may, without displacing men and women from their present vocations, expand enormously the beneficial scope of industry and turn the surplus man into a surplus producer in behalf of NEW and necessary wealth.

In California and Oregon and Washington there is pending a number of construction works that means an investment of over TWO BILLION DOLLARS that has

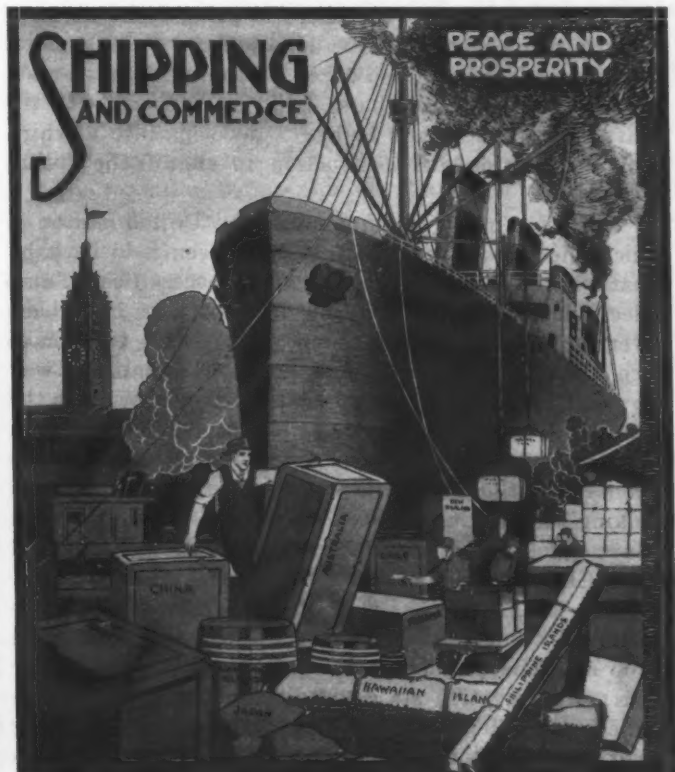
been postponed by war. The banks of this country are bursting with money to finance these enterprises; and where the banks are not called in the capital has been subscribed by the present stockholders.

So, let's start the building program on the jump.

Start building and the manufacturer will have no uncertainty of his future. He will keep the dollar busy, he will absorb the soldier in a thousand different ways. He will solve the labor problem. He will keep the railroads busy and turn a deficiency into a surplus. He will build the foundation upon which industry may organize itself so that both labor and capital may co-operate beneficially in actually making this country, at least, a "safe place for democracy."



PANHANDLE LUMBER COMPANY MILLS—IONE, WASH.



PRODUCED IN COLOR IN S. F. CHRONICLE ANNUAL, 1919.

The DEALER

THE DEALER'S PLACE IN RECONSTRUCTION TO START SOMETHING

By WILLIAM RUTLEDGE McGARRY

THE situation which confronts the legitimate dealer is not half so embarrassing as the average citizen would think.

The fact that during the period of the war he has been practically put out of commission is a little distressing, but carries with it a certain amount of assurance that there is a bright lining ahead.

While the circumstance of railway rates being jumped up-up-up from the moment that the Government assumed control, and began displaying its capacity to mismanage things and turn profits into losses, may have a tragic aspect to all lines of business, the fact that the dealer is alive to the situation and an election is not far away offers a certain assurance of hope that all may not be lost even if the Government at Washington is joy riding round the country. There is an end, even to a joy ride; and the time is rapidly approaching when the speeders will have to pay the bill or get off and walk.

The improvements which the American people have denied themselves for patriotic purposes have long since passed the stage of selfdenial. They have reached the stage of personal assertion,—of definite demand; and from this moment onward there is going to be no more delay in doing what must be done to save a monumental investment from ruin and decay. From now on we must forge ahead, and build, build, build to catch up with the swift current of events before it develops into a whirlpool of inanition and destruction to engulf the future of America.

There is not a community in the United States in which the building program has not been held back by what we have learned to regard as war necessities. Small office holders for the first time in their lives have been given authority to "say something." And they have been talking ever since. Talking in a dictatorial way too; and taking it for granted that they OWNED the country. People are heartily tired of it. Every town, city and village are sending up their protest,—and to whom? To the men who ought to stop this political "talking" and begin DOING something,—to the very men who control things in ALL communities,—to the local DEALER himself.

The local dealer has it in his power this very minute to START things going if he only will make up his mind to do so. The demand is there. The public was never in a more receptive state of mind. The return of the soldier makes it imperative that some things be going along to absorb the overhanging man-power that is constantly accumulating like a drift upon the eaves, and

liable to fall of its own weight upon the unsuspecting pedestrian beneath.

If the local dealer does not begin the movement AT ONCE there will stealthily creep into the game the fugative "jobber" who guts the market, makes a hole in legitimate enterprise and lets PERMANENT business get away. In many parts of the country this very thing is happening at the present time, and in some parts of the country the dealer is trying to correct the errors of his own making or inattention. The producer is being appealed to to transfer his line. In a few instances the producer is from Missouri,—made so, in fact, by the disinclination of the dealer to get a move on and wake his own community up.

A detailed statement of deferred construction, as estimated by the Government, itself, shows at the time of this writing nearly three and a quarter BILLION DOLLARS awaiting the dealer's initiative.

A country in which its transportation system is inefficiently operated or permitted to lapse into a state of dry rot imperils its very life. It is little better than the country without any transportation system. Like Tibet or parts of Mongolia, for instance, where people live like cats and mice on less than six cents a day and where THERE IS NO BUILDING nor any civilization sufficiently advanced to develop WEALTH. And where these things are permitted to exist for any length of time people just naturally lapse into a state of immobility and despair as fit subjects of imposition by the political satrap and of pity from the self-respecting portion of the world. Without BUILDING or HOME MAKING transportation is deprived of its very life blood, and the condition, described above, in time, appears. If it is continued long enough men fall back, like Arabs into tents and silently fade away.

If the transportation system of this country becomes a wreck the banking system will be equally hard hit; for it depends on the movement of commodities to develop new wealth.

Unless the building industry of the country is revived the transportation system will become a wreck; for transportation depends on building and the movement of building materials to keep it out of the Receivers hands. It is the iron, the steel, the lumber, the cement, the brick, the granite, the marble, the fabricated products of every kind from expanded lath to asbestos, lime or paints, moving from one part of the country to another, that keeps the locomotive on the go and saves the road from rust and ruin. And if this thing does happen BILLIONS IN WAGES will never reach the bank nor

float into factory or farm, so that in the end hunger, stagnation and ruin confronts our banking power. If such a condition should ever be permitted to develop, through inattention or short-sightedness on the part of those most vitally interested it will be good night.

Let the dealer inform his banker that the Secretary of the United States Treasury is very anxious to encourage the resumption of building all over the United States. He has recently informed the public that he "sees no valid reason why sufficient credit is not **MADE AVAILABLE** for useful building purposes" throughout the whole country. As a matter of fact no one who has any understanding of the situation, at all, can fail to appreciate the position of the Treasury Department, which realizes the dependence of the railroad on the building traffic for a profit which the Government has guaranteed notwithstanding the manifest loss impending without resumption of the building industry and the whole souled co-operation of the dealer now.

When it is considered that one half of the total taxes in the United States depends upon the building industry and the material dealer's activities; that 2,500,000 railway employees, 10,800,000 engaged in agriculture and 4,270,000 more engaged **IN** the building industries, are dependent on a revival of building we gain some estimate of the enormous losses that are daily accumulating while building remains inactive or stands still. No other country in the world could survive such monumental waste or criminal destruction. In the circumstances the local dealer with millions invested in his business **MUST** get a move on. He must call into co-operation the manufacturer as well as the banker and start the wheels a spinning before it is too late.

The manufacturer will have no objection. He is loosing about a **BILLION DOLLARS A YEAR** through this inactivity.

Lumber, alone, is loosing \$600,000,000 a year by our inaction.

Clay and Brick yards are dropping \$200,000,000 a year.

Cement falls behind \$100,000,000 a year by this stagnation.

Stone and sand and lime and slate loose \$120,000,000 a year.

Gypsum and marble miss \$10,000,000 every year.

Then there is the copper and the iron and the hundred and one inter-correlated and interdependent industries that find the ground slipping from under them as the war order ceases and the political hanger on hesitates to cut the knot that will release industry and hurl him into a jobless past.

Nevertheless prosperity is **COMING WITH A MIGHTY RUSH** that nothing can possibly restrain. History is about to repeat itself with a vigorous appeal to the business instinct of America and again demonstrate that the quick destruction of war is to be followed by a quicker reproduction of peace. This is the logical, the inevitable, the cheerful indications alive today.

As an indicia of that prosperity let us take a quick glance at the American farmer's market.

Never before in the history of the nation has the farmer been in so prosperous a condition.

Never before in history has the demand upon the farmer for better housings been so manifest as in the past two or three years.

Never before has the just demand of the farm laborer for proper lodgings and decent surroundings been so cordially indorsed by the Government and the State.

The farmer **MUST** build whether he likes it or not.

The time has gone by when he can appeal to "prohibition" as an excuse for improper housings and the importation of coolie labor.

The American people demand of him **IMPROVEMENTS** that his high prices for the last few years require and justify in behalf of continuous production; and if the farmer does not **BUILD** then the State will build for him or for the soldier who will take over his holdings for the benefit of society at large. For this would seem to be the solution of the soldier problem: The State can well afford to **BUY** the farm from the inefficient and indolent farmer and turn it over to the soldier on a basis of deferred payments. And everybody **KNOWS** that in **THAT** event the farm **WILL** begin a sanitary system of housings that means an incomprehensible demand for materials in the rapidly approaching future.

That is **ONLY ONE** indication of prosperity.

The road building program is another.

And the municipal and school building program is still another.

And there is **FOREIGN TRADE** which will continue to enlarge the demand for larger quarters and a more intense demand for raw materials from all parts of the world in exchange for our own products here.

So, from all indications, **NOW** is the time to make a dive for business. Now is the time to assume control of the situation before the situation assumes control of you. Make a **START** this minute. Go over and see your banker. Tell him what you **INTEND** to do. Then go round the corner and see your manufacturer and tell him that you want him to start up; tell him that you'll take his entire output; tell him to take on a couple thousand of the "boys" from "over there" and you'll keep them all busy "over here" from now till "kingdom come." Then you may drop down on the Station Agent and notify him that you **WANT CARS**; and, if he happens to be one of "them government fellows just catching on" **TELL HIM HOW** to get them **QUICK**, for, otherwise **ETERNITY** may be here before **HE** will get a move on. And **YOU** are not building for eternity on this earth. You're merely building **IN** the present for a future of decent living conditions among your fellow men. You are building, as all patriotic men must build to make this country a decent place to live in and where the rewards of sacrifice and of patriotism are regarded with reverent respect by Americans worthy of that inspiring name.

REAL ESTATE LOANS & INSURANCE

THE problem of providing homes and houses for the rapidly increasing population of the cities about San Francisco Bay is taxing the real estate men to the utmost. The sudden ending of the war and the awakening of the vast peace commercial and industrial activities has been responsible in a great measure for the influx of so many people to San Francisco, Oakland, Berkeley and Alameda, making the housing problem at once take on an importance which it has not had for some time.

In spite of the new apartment house construction, the remodeling of old fashioned flats, and the building of new homes and bungalows, there is such a shortage of homes—both for rental purposes and sale—that owners of lots, contractors, builders and real estate men are seriously perturbed as to the best way to meet the situation.

The campaign to create a favorable public impression looking towards the immediate construction of all kinds of new buildings which the government is now fostering, and the real demand for new structures of all kinds will undoubtedly have a tendency to make owners see that the wisdom of holding off from building on their property is at least problematical. The plea which many owners make regarding the high cost of materials and the fear that if they build now possibly materials will drop in prices within the next month or so, is at the best but a forecast into the future. Many materials are much lower now, than they were six months ago and as the demand for homes, business houses and other structures is imperative and would mean a profit as soon as they were ready for occupancy it looks as if to build at once would be the part of wisdom.

* * *

Certain Disadvantages of Assessment Districts.

The danger which a property owner runs many times of losing the title to his holdings and still being totally in ignorance of the true state of affairs is plainly told by the resolution which the California State Realty Board passed in a meeting in Sacramento during its recent convention and which it sent out to all incorporated cities of the state, realty boards and other interested organizations.

The San Francisco Real Estate Circular commenting upon the dangers to property owners of losing their property by the operation of some of our assessment district laws says:

"Under the operation of the various local improvement laws and charters of municipalities it often happens that assessment districts are formed for local improvements and property assessed without the owner receiving notice of the proceedings. As a consequence the property may be sold for delinquency, the time for redemption expire and a deed issued to the purchaser, all without the knowledge of the owner, his first intimation of it being when he finds his title has been lost.

"The California State Realty Federation directed attention to these dangerous possibilities, and urged that the local improvement acts and municipal charters be so amended as to provide, that in all cases of sales of property for delinquent assessments, the municipality should become the purchaser and means be provided to finance the improvements upon that basis; that the period of redemption from such sales should be five years, with such penalties and interest, however, as to make it advantageous to the owner to redeem at the earliest possible time, and that it should be the duty of the tax collector of the city in which such assessment is levied, to affix to all tax bills of property sold for such delinquent assessments, a notice stating the fact of such sale and in general terms the assessment under which the property was sold, and the office in which redemptions may be made.

"Resolutions to this effect were sent to the Board of Supervisors of all incorporated cities of the State, and realty boards and other interested organizations were requested to adopt similar resolutions and file copies with the Boards of Supervisors of their respective localities. It should also be required that so far as possible personal notice be given each property owner within the proposed assessment district of the first intention to form such district."

* * *

Real Estate in February Shows Healthy Increase Over January.

The showing made by the city real estate transactions for February would seem to indicate a steady upward tendency in the trend of the realty market. During February 406 sales were recorded valued at \$2,401,117. In January the number of sales were 307 valued at 2,813,772. Inquiry for property of the better class was much in evidence and the steady unusual demand for small houses and apartments kept up with no apparent let up in sight. In the commercial and industrial districts a brisk activity is manifesting itself, indicating solid city development and business growth.

The San Francisco Real Estate Circular, published by Thomas Magee and Sons, in commenting on the local situation says:

"Economic uncertainties such as continued public or private operation of railroads and shipping, labor disturbances, lack of stable prices, commodities and money conditions and increased taxation burdens, both federal and local, have deferred many real estate investments, and especially have these conditions deferred the erection of new and most necessary buildings for business uses and also for residential purposes. It is confidently believed that after the flotation of the Victory Loan, the last U. S. Government loan next month, that the real estate market will become quite active again."

* * *

Pacific Oil Engine Company Looking For More Property.

The Skandia Pacific Oil Engine Company has made an application to the Oakland City Council for a lease of 150 feet frontage with a depth of 200 feet of property adjoining their present plant at Ford and Derby streets. The application seeks a twenty-five year term and if same is granted the company will make improvements to the value of \$50,000.

CONSTRUCTION NEWS

ITEMS FROM OUR DAILY CONSTRUCTION NEWS SERVICE

CALIFORNIA

San Francisco—M. A. Little, 1347 Fourth street, is building a 4 story brick apartment house on the northeast corner of Franklin and Sacramento streets. Architect E. E. Young prepared the plans. Cost, \$80,000. The building will contain 17 apartments; walls plastered and interior wood trim will be Red Gum; Tile will be used in bathrooms and vestibule and behind sinks and drain boards in kitchens; Double hung and Hausers patent casement windows to be used; the plumbing fixtures will be enameled cast iron bath tubs in basement are to be the 5 foot "Essex," all others "Viceroy" or equal.

San Francisco—Board of State Harbor Commissioners have awarded the following contracts:

Bituminous Pavement on concrete deck of Pier 31, to Clark & Henery Construction Co., at \$12,999.59.

Construction of addition to Pier 43, to J D. Hannah, at \$38,437.00.

Construction of Fish Market at foot of Leavenworth st., to Mason & Morrison, at \$10,477.00.

San Francisco—Board of Public Works have received the following bids for furnishing and delivering air pipe; Cont. No. 57, Hetch Hetchy Water Supply Co.:

1. Western Plumbing & Supply Co., air pipe 24inch, \$1.90 per foot; cinch bands, \$4.50 each.

2. Montague Plumbing & Supply Co., air pipe, 24 inch, \$1.88 per foot; cinch bands, \$4.25 each.

3. Forderer Cornice Works, air pipe, 24 inch, \$2.88 per foot; cinch bands, \$4.50 each.

4. Atlas Heating & Ventilating Co., air pipe, 24 inch, \$3.40 per foot; cinch bands, \$5.00 each.

San Francisco—Owner, T. W. Corder, Inc., 1301 First National Bank Bldg.; Architects, Cuninghame & Politeo, First National Bank Building; Alterations and additions to St. Francis Theatre; changing first floor balcony and building basement under building. To be used for Techau Tavern. Location, South side of Geary street, west of Powell. Cost, \$45,000.

San Francisco—Mexicali Brewing Association, Lower California, have commissioned A. Maritzen, Engineer, to prepare plans for a Brewery plant, partly reinforced concrete and wooden frame buildings to be built at Mexicali, Lower California, Mexico. Cost, \$100,000 when completed.

San Francisco—Nelson Bros. are building nine one story bungalows, with basement garage in each, in Westwood Park. The exterior of the bungalows will be rustic and cement plaster; interiors will have plastered walls with floors and trim of Oregon pine. Cost estimated at \$3,600 each.

Los Angeles—Plans are being prepared by Architect Homer W. Glidden, 1121 Beechwood Drive, for a lodge and store building to be erected at Fillmore for the Fillmore Masonic Temple Association. It will be a three story structure. First floor will be divided into storerooms; the second floor will contain a lodge room, parlors, committee and preparatory room, kitchen, choir balcony and closets. The building will have concrete foundation, brick walls, plate glass store fronts, cement tile and wood floors, tile ornaments, etc.

Los Angeles—A 15 acre site at Vernon has been purchased by The Pan-American Petroleum Company on which they will erect a refinery at a cost of \$250,000.00. A group of buildings will be erected for the manufacture of greases and paraffin products. The buildings will be concrete, brick, hollow tile and corrugated iron.

Los Angeles—The Milwaukee Building Company, 316 Wright & Callender Building, will erect a one story brick garage at 938 South Grand Avenue, for Dwight Hart, proprietor of the Rosslyn Hotel. The building will have concrete foundation, buff and cream pressed brick facing, plate glass front, reinforced concrete lintels and side wall, steel beams, etc. Cost, \$11,200.

Oakland—Architects Shirmer-Bugbee Company, Thayer Building, are making drawings for a two story residence and a bungalow which will be erected in Lakeshore Highlands. Both buildings are frame with cement exterior; interiors plastered and finished in pine, painted, with hardwood floors, modern plumbing fixtures. Will cost about \$4,000 each. Mr. Ramsey is the owner of one house and Mr. Barker of the other.

Oakland—Owner, A. F. & F. H. Snyder; Contractor, H. H. Weider. Three story 36 room apartments. Location, S. W. corner 10th and Fallon streets. Cost, 26,500. Exterior, plaster; Roof, tar and gravel.

Oakland—P. J. Walker Co., Monadnock Building of San Francisco, have the contract for a two story, reinforced concrete office

building to be built on 69th Avenue and Foothill Boulevard, for the Chevrolet Motor Co. George W. Kelham, Sharon Building, San Francisco, is the architect.

Sacramento—The Virden Packing Company, recently incorporated for \$5,000,000, are planning the erection of a large Packing House and Union Stockyards, capable of taking care of a weekly market of 5,000 hogs, 2,000 cattle and 3,000 sheep; Covering between 50 and 100 acres in West Sacramento. The cost of the plant is estimated at \$2,500,00. In addition to this the company is planning for a canning factory for local fruits, vegetables, etc.

Fresno—Architect E. J. Kump, Rowell Building, has completed plans for a two story garage building and auto sales department for the F. H. Whipple Machinery Company, Main street, Visalia. The building will consist of sales room and machinery department on the first floor and auto storage on the second floor. Exterior, pressed brick and ornamental stone exterior. Cost, \$20,000.

Fresno—Plans have been completed by Architect E. Mathewson for the new Madary planing mill to be erected at H and Santa Clara Streets. Walls, concrete; roof, sawtooth design. Estimated cost, \$50,000.

Visalia—The National Bank contemplates erecting a bank and office building, four or five stories in height, to cost about \$200,000. Tentative plans are now being considered.

Hollister—The big warehouse of the Old Mission Portland Cement Company at San Juan was destroyed by fire. Plans are now being drawn and the warehouse will be rebuilt at once.

Vallejo—Architect C. Edward Jerry, Jr., has been authorized by the City Commissioners to prepare a set of plans and specifications for the proposed city hall which is to be erected at the southeast corner of Capital and Marin Streets.

San Jose—Plans are being prepared by Architect Charles S. McKenzie, for a combined crematory and columbarium to be built at Oak Hill cemetery. The buildings will be constructed of concrete and stone. All windows and the large skylights will be fitted with cathedral glass. The columbarium will be a fireproof building. Estimated cost, \$50,000.

OREGON

Salem—Architects Lewis Irvine Thompson of Portland, and Fred Legg, of Salem, were awarded the drawing of plans and specifications for new buildings to be constructed at the state institution for the feeble-minded and at the state tuberculosis hospital. At the school for the feeble minded two dormitory cottages are to be built, at a cost of \$27,000 each. One is awarded to each of the architects.

Plans will be drawn by Architect Thompson for new pavilion and superintendent's cottage at the tuberculosis hospital, to cost about \$21,500. Architect Legg will draw plans for the dairy barn at the school for feeble minded, estimated at \$3,000, and improvements in the heating plant at \$10,000.

Portland—Orders have been received by Architects Hough-taling & Dougan, Henry Building, to proceed with plans for a large residence to be built at Pendleton for Guy Wyrick. The building will be of frame construction and will cost \$12,000. It will contain 8 rooms, 2 fireplaces, 2 toilets, hardwood floors throughout and a furnace heating plant.

WASHINGTON

Seattle—A huge oil dock and oil storage plant will be built for the General Petroleum Corporation. It will be located east of the Todd Dry Dock & Construction Co's. plant on the northwest corner of Harbor Island. A large concrete fire wall of the type being erected by several local plants will surround the plant and a Foamite fire protection system will be installed. Estimated cost, \$400,000.

Seattle—The Rounds-Clist Construction Co., Walker Building, will erect a five story Navy Y. M. C. A. building in Bremerton. The building will be fireproof, modern in every respect. Cost, \$60,000.

Seattle—Architect A. E. Doyle, of Portland, Oregon, will soon open offices here. Mr. Doyle will plan and superintend the alteration of the Baillargeon Building, recently purchased by the National Bank of Commerce, at a cost of about \$600,000. Cost of alterations has not been estimated, but it is thought, that when ready for occupancy, the building will represent an outlay of \$1,000,000.

Yakima—Members of the Selah I. O. O. F. lodge announce that they will at once erect a \$20,000 lodge and office building. James Lancaster, N. M. Shoonover, D. Finley, Elmer Dahlin and B. Baker are the committee on plans for the building.

REFERENCE INDEX OF ADVERTISERS

Containing List of Manufacturers, Their Representatives and Serviceable Literature

ASBESTOS BUILDING LUMBER

Keasbey & Mattison Co., Ambler, Pa.

J. A. Drummond, 245 Mission Street, San Francisco, Cal.

Illustrated and descriptive pamphlet, 7 $\frac{1}{2}$ x10 $\frac{1}{2}$, 8 pp. Pamphlet, 4x8 $\frac{1}{2}$, 8 pp. Price list, 3 $\frac{1}{2}$ x6 $\frac{1}{4}$. Literature of various sizes, samples, etc. "Service Sheets," working drawings, details of application, size 16 $\frac{1}{2}$ x21 $\frac{1}{2}$.

ASBESTOS CORRUGATED SHEATHING

Keasbey & Mattison Co., Ambler, Pa.

J. A. Drummond, 245 Mission Street, San Francisco, Cal.

Descriptive catalogue, 5 $\frac{1}{4}$ x8 $\frac{1}{4}$, 24 pp. Catalogue of details and specifications for application of roofing and siding, size 8 $\frac{1}{2}$ x11, 40 pp. Lists of buildings covered. Price lists, 3 $\frac{1}{2}$ x6 $\frac{1}{4}$, 6 pp.; and literature of various sizes, samples, etc. "Service Sheets," working drawings, details of application, size 16 $\frac{1}{2}$ x21 $\frac{1}{2}$.

ASBESTOS SHINGLES

Keasbey & Mattison Co., Ambler, Pa.

J. A. Drummond, 245 Mission Street, San Francisco, Cal.

Illustrated catalogue. Detail specifications, 8x10, 20 pp. Descriptive catalogue, various types of roof covering, 5 $\frac{1}{4}$ x8 $\frac{1}{4}$. Various pamphlets, 3 $\frac{1}{2}$ x8. Current price lists, 3 $\frac{1}{2}$ x6 $\frac{1}{4}$, 6 pp. Lists of buildings and literature, various sizes, samples, etc. "Service Sheets," working drawings. Detail of application, size 16 $\frac{1}{2}$ x21 $\frac{1}{2}$.

BARS, REINFORCING

Pacific Coast Steel Co., Rialto Building, San Francisco, Cal.
Square, round and corrugated.

BRICK, FIRE AND REFRACTORIES

Gladding, McBean & Company, Crocker Bldg., San Francisco, Cal.
Simons Brick Company, 125 West Third Street, Los Angeles, Cal.

BRICK, PRESSED

Gladding, McBean & Company, Crocker Bldg., San Francisco, Cal.
Simons Brick Company, 125 West Third Street, Los Angeles, Cal.

CEMENT, PORTLAND

Santa Cruz Portland Cement Co., Crocker Bldg., San Francisco.
Standard Portland Cement Co., Crocker Bldg., San Francisco, Cal.
Bulletin 12 pp. Size 6x9; also furnish bulletins and specifications for various classes of work requiring Portland Cement.

CONTRACTOR'S ASSOCIATIONS

Building Industries Association, 110 Jessie St., San Francisco.
General Contractors Association, Sharon Building, San Francisco.

CORK FLOOR

Van Fleet-Freear Co., 120 Jessie Street, San Francisco, Cal.
Illustrated catalogues, etc.

ELECTRICAL EQUIPMENT

Keasbey & Mattison Co., Ambler, Pa.

J. A. Drummond, 245 Mission Street, San Francisco, Cal.

Descriptive Pamphlet, 3 $\frac{1}{2}$ x6. 12 pp. Descriptive, 4x8 $\frac{1}{2}$. 8 pp.
"Service Sheets" working drawings. Detail of application.
16 $\frac{1}{2}$ x21 $\frac{1}{2}$.

ELEVATORS

Otis Elevator Co., Eleventh Avenue and 26th Street, New York.
Otis Elevator Co., 2300 Stockton Street, San Francisco, Cal. Offices in all principal Coast cities.
Otis Electric Traction Elevators. Bulletin. 6x9 in. 23 pp.

ESCALATORS

Otis Elevator Co., Eleventh Avenue and 26th Street, New York.
Otis Elevator Co., 2300 Stockton Street, San Francisco, Cal. Offices in all principal Coast cities.
Otis Escalators. Bulletin. 6x9 in. 36 pp.

GLASS

W. P. Fuller & Co. Principal Coast cities.
Plate, Sheet and Mirror Lists.
Glass Samples.

Keasbey & Mattison Co., Ambler, Pa.

J. A. Drummond, 245 Mission Street, San Francisco, Cal. Pacific Coast representative CORRUGATED WIRE GLASS for skylight construction (without housings), used in connection with Asbestos Corrugated Sheathing. Catalogue of details. 8 $\frac{1}{4}$ x11. 40 pp.

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Van Fleet-Freear Co., 120 Jessie Street, San Francisco, Cal.
Illustrated catalogues, etc.

IRONING BOARDS

National Mill & Lumber Co., 318 Market Street, San Francisco, Cal.
Pamphlet. 3 $\frac{1}{2}$ x6 $\frac{1}{4}$ in. 4 pp.

LANDSCAPE ENGINEERS

MacRorie-McLaren Co., 141 Powell Street, San Francisco, Cal.
Descriptive catalogue. 5x8 $\frac{1}{2}$. 52 pp.

LIGHTING EQUIPMENT

The Reflectolyte Co., 914 Pine St., St. Louis, Mo.

J. A. Drummond, 245 Mission Street, San Francisco, Cal.

Reflectolyte, containing specifications, illustrations and engineering data for superior indirect illumination, 7 $\frac{1}{4}$ x10 $\frac{1}{4}$ in., 24 pp.
Folder, 3 $\frac{1}{2}$ x6 $\frac{1}{4}$ in., illustrating the Junior Reflectolyte for inexpensive installation.

MILL WORK

National Mill & Lumber Co., 318 Market Street, San Francisco, Cal.
Catalogue of Moulding Columns, Doors and General Mill Work.
7x10. 94 pp.

PAINTS, ENAMELS AND WOOD FINISHES

Berry Bros., Wight and Leibe Streets, Detroit, Mich.

Berry Bros., 250 First Street, San Francisco, Cal.

Natural Woods and How to Finish Them. Complete varnish specifications. 4 $\frac{1}{2}$ x6 $\frac{1}{4}$ in. 94 pp.

Luxeberry Cement Coating. Color card. 3 $\frac{1}{2}$ x8 $\frac{1}{2}$ in. 3 pp.

Boston Varnish Co., Everett Station, Boston.

San Francisco Office, A. L. Greene, Mgr., 269 Eighth Street.
Kyanize Enamel. Complete specifications. Booklet. 5x7 in. 20 pp.

Kyanize White Enamel. Directions. Circular. 3 $\frac{1}{2}$ x6 in. 8 pp.Price List of Varnishes and Enamels. 3 $\frac{1}{2}$ x6 in. 24 pp.

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Color cards and descriptive circulars on: House Paints, Floor,

Porch and special paints for all purposes.

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Finishes and Kalsomine. 20-page booklet.

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R. N. Nason & Co., 151 Potrero Avenue, San Francisco, Cal.

Catalogues, literature and color cards.

Wadsworth, Howland & Co., Inc., 139 Federal Street, Boston.

San Francisco Office, James Hambly & Sons, 268 Market Street, San

Francisco, Cal.

Los Angeles Office, 447-449 E. Third Street, Los Angeles, Cal.

Bay State Brick and Cement Coating. Catalogue. 4x9. 24 pp.

Color plates.

Bay State Finishes, Stains, and Varnishes. Pamphlets. Color

cards, etc.

PHOTOGRAPHERS

Graham Photo Company, 110 $\frac{1}{2}$ South Broadway, Los Angeles, Cal.

PLUMBING EQUIPMENT

Pacific Sanitary Mfg. Co., 67 New Montgomery Street, San Francisco,
Cal.

Northern Manager, H. L. Frank, 80 Front Street, Portland, Ore.

T. A. Williams, Scott Building, Salt Lake City, Utah.

General catalogue "C." 6 $\frac{1}{2}$ x9 in. 176 pp. Indexed.

School Sanitation Book. 6x9. 32 pp.

Export Catalogue "E." 6x9. 160 pp.

Book of Bath Rooms (for clients). 6x9. 56 pp.

Standard Sanitary Manufacturing Co.

San Francisco Warehouse, Display Rooms and Offices, 149 Bluxome St.

Los Angeles Warehouse, Display Rooms, Offices, 216-224 So. Central

Seattle, 5300 Wallingford Ave.

General Catalogue "P." 9x12, 674 pp. General Catalogue "PF."

9x12, 329 pp. Factory Sanitation Catalogue, 9x12, 36 pp.

Built-in Bath, 9x12, 37 pp. Pottery Catalogue Sanitary Earth-

enware, 9x12, 38 pp. Shower Booklet, 3 $\frac{1}{2}$ x6, 19 pp. Efficiency

Kitchen Book—Modern Kitchen Equipment, 5x7, 15 pp.

Plumbing Fixtures for the Home, 5x7 $\frac{1}{2}$, 63 pp.

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